IN THE UNITED STATES DISTRICT COURT

FOR THE EASTERN DISTRICT OF TEXAS

MARSHALL DIVISION

OPTIS WIRELESS TECHNOLOGY, LLC, ET AL.	)(	CIVIL DOCKET NO. 2:17-CV-123-JRG-RSP
VS.	)(	MARSHALL, TEXAS
HUAWEI TECHNOLOGIES CO., LTD., ET AL.	)(	DECEMBER 1, 2017 11:19 A.M.

CLAIM CONSTRUCTION HEARING

BEFORE THE HONORABLE JUDGE ROY PAYNE

UNITED STATES MAGISTRATE JUDGE

APPEARANCES:

FOR THE PLAINTIFFS: (See Attorney Attendance Sheet docketed in minutes of this hearing.)

FOR THE DEFENDANTS: (See Attorney Attendance Sheet docketed in minutes of this hearing.)

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I N D E X

December 1, 2017

COURT SECURITY OFFICER: All rise.

THE COURT: Good morning. Please be seated.

For the record, we're here for the claim construction hearing in Optis Wireless Technology, et al., versus Huawei Technologies, which is Case No. 2:17-123 on our docket.

Would counsel state their appearances for the record, please?

MS. TRUELOVE: Good morning, Your Honor. Jennifer Truelove with McKool Smith for Plaintiff Optis. With me today, I have Mr. Kevin Burgess --

MR. BURGESS: Good morning, Your Honor.

MS. TRUELOVE: -- Christine Woodin, and Kevin Hess, all from McKool Smith.

MR. HESS: Good morning.

MS. TRUELOVE: Also -- also David DeZern from Gray Reed & McGraw.

MR. DEZERN: Good morning.

MS. TRUELOVE: With us from the client, I have Stacie McNulty, Mark Born, and Richard Misiag. And we're ready.

THE COURT: Thank you, Ms. Truelove.

MR. SMITH: Good morning, Your Honor. For the Huawei Defendants, Huawei Device USA, Inc., and Huawei Device Company Limited, Michael Smith. And with me at

counsel state, Mr. Bob Haslam --

MR. HASLAM: Good morning, Your Honor.

MR. SMITH: -- Mr. Greg Nieberg --

MR. NIEBERG: Good morning.

MR. SMITH: -- and Mr. Anupam Sharma --

MR. SHARMA: Good morning, Your Honor.

MR. SMITH: -- and Mr. Stanley Young --

MR. YOUNG: Good morning.

MR. SMITH: And with us from the client, Weiguang Kong, Mr. Liangxin Yang, and Laric Zhu. And we're ready to proceed, Your Honor.

THE COURT: All right. Thank you, Mr. Smith.

I will also note for the record that earlier this morning, we distributed to counsel for both sides a set of preliminary constructions of the disputed terms.

I wanted to state for the record that the purpose of issuing those preliminary constructions is not to dissuade either side from taking whatever position you think is appropriate on these terms. Rather, it's to let you know where the Court is after the initial review of the pleadings and the record, and to allow you to focus your time and attention where you think the Court may have most missed the mark.

I do reserve the right to amend these preliminary constructions and not uncommonly do alter them based on the

arguments received at this hearing. So I hope that you'll take them in that spirit.

I would like to hear the arguments on a term-by-term basis, but I'm happy to take them in whatever order counsel think would be most efficient or to group them if -- if counsel deem that helpful.

Mr. Burgess?

MR. BURGESS: Your Honor, thank you. I think the parties have agreed to just take the terms in the order that you've listed them in your preliminary --

THE COURT: All right.

MR. BURGESS: -- with -- you know, and -- and you haven't always adopted one or the -- one side or the other's proposal, but we'll sort of make an estimation of who's -- who's the farthest away, and they'll go first.

THE COURT: All right. That's fine. I'll turn it over, then, to counsel for Plaintiff to lead off.

MR. DEZERN: Thank you, Your Honor. David DeZern for Plaintiffs.

I believe the first term up is from the '238 patent, and given the description of the procedure from Mr. Burgess, I believe someone from Huawei's counsel may want to start.

THE COURT: All right. Thank you, Mr. DeZern.

MR. SHARMA: Good morning, Your Honor.

THE COURT: Good morning, Mr. Sharma.

MR. SHARMA: Your Honor, the first term I'd like to argue is the variable length code table in which we appreciate the Court's construction that was given to us as guidance this morning.

I would like to approach the construction, two parts. The first part in the construction given by the Court, we talk about a table for transforming each variable length code into a value that denotes a number of non-zero coefficients in a block.

And second part, within a given table, each variable length code is unique and mapped to one unique value.

Your Honor, I think the second part is correct. It matches the descriptions in the specification. It matches how the claims operate. It also matches how the invention operates.

On the first part, the table part, Your Honor, I think the -- the variable length code table is used both by the encoder and the decoder. And that's the construction we had adopted to capture that.

And maybe I can quickly go through our presentation and show how the variable length code table is used both from the encoder and decoder side and also highlight along the way that -- how each code is unique and how it maps to

one unique value.

In the patent, the '238 patent describes a code table and a VLC table. And the purpose of the code table and the VLC table is to collectively transform a coefficient number value into a variable length code, or VLC. I'll use the term VLC as a shorthand for variable length code.

In the example shown in the patent, Chart 2 takes the coefficient of a value and maps it into the code number based on the code table you want to use. And that mapping between the coefficient number value and the code number, based on a code table, is unique. So that part is satisfied.

Similarly, in a VLC table, a code number is mapped into a variable length code, VLC, using a particular VLC table. There also the code number maps uniquely to one variable length code -- a unique code which is for a given table.

So if you look at the whole transformation process, you are starting from coefficient number value on the left-hand side, going to the code table and going through the VLC table and ending up with a VLC. The whole process is unique, one-to-one mapping.

And that is true -- that is needed because both the encoder and decoder use the VLC table to convert coefficient numbers into bit streams or VLCs and then convert the VLCs

back into the coefficient numbers.

And as shown over here on the encoder side, Code Table 3 is used, and the VLC Table No. 3 is used. In this example, Coefficient No. 4 is provided, which through a two-step process, converts into a VLC which is 0100.

Now, this stream is then sent over to the decoder, and the decoder uses the same table, VLC Table 3 and Code Table No. 3. And the same bit stream 0100 is then transformed into Coefficient No. 4 by using the same tables that were used on the encoder side.

And, again, the process works over here because there's a unique mapping from the coefficient numbers to code numbers and that a unique mapping from the code numbers into the bit stream, and that mapping is unique one-to-one.

Similarly, on Figure 19 on the decoder side, the same tables are used. And, again, each of the tables has unique mapping. The VLC Table No. 3 here maps the bit -- bit stream into unique code number, and then the Code Table 3 maps the code number into unique coefficient number.

And the reason for the symmetry is because both the encoder and decoder have to encode the same value and extract the same value.

THE COURT: Now, we are construing this term in the context of Claim 1.

MR. SHARMA: Yes, Your Honor.

THE COURT: And does Claim 1 encompass both the encoding and decoding?

MR. SHARMA: Claim 1, as drafted, Your Honor, mentions a decoder, but as you go through the claims, a vast majority of limitations are drafted as to what would have happened on the encoding side.

For example, in the variable length decoding unit, it is considered to perform variable decoding on a coder stream which is generated by coding the number of non-zero coefficients in the current block. That encoding happened at the encoder side.

Similarly, earlier in the limitations when they talk about a picture decoding unit, it talks about the process that occurred on the encoding side, and the decoder was simply to reverse this process on the decoder.

So the claim -- the preamble mentioned the receiving apparatus, but the receiving apparatus is undoing what the encoder had done on the encoding side.

This is -- this other embodiment in the patent which is a simplified one, it's separating a two-step process of going through a code table. It simply goes through a VLC table. And here the Coefficient No. 4 is mapped into a unique VLC. Each entry in the coefficient number value table is unique and has a corresponding one-to-one mapping with a unique bit stream.

And, similarly, on the decoder side, same unique mapping is used to then recreate the coded bit stream. This bit stream is coded at the encoder side. And by using the same process, you recreate the Coefficient No. 4 on the decoder side.

And just to emphasize the uniqueness part of it, this -- all the experts agreed because our -- the expert for Pan -- PanOptis gave Mr. -- Dr. Richardson gave a declaration when he talked about variable length code tables, and so did Dr. Schonfeld, the expert for Huawei. And both experts agreed that each table has to have a unique mapping between the coefficients and the VLCs, or the variable length code tables.

Here's an example from the declaration from Dr. Schonfeld, expert for Huawei, and his example was rebutted -- or not rebutted by the Plaintiffs' expert.

This table shows on the left-hand side, 0 through 8 are the total number of coefficients. On the right-hand side are the corresponding variable length code tables.

We have modified this example to show that for No. 4 and 5, you have the same variable length code. So in this case, this construction will satisfy PanOptis' construction but would not satisfy Huawei's construction because uniqueness property is not met, which is that the uniqueness property is captured in the Court's construction.

And I -- if you were to use that table, which does not have a unique value, the encoder and decoder would not work.

If the -- if you will take a number set of 3, 1, 4, just as an example of one here, they would be encoded by the encoder using the same table as 0001, 01, and then 0000s and a 1. These values will be the ones that have been encoded by the encoder to create the coded stream, and the coded stream is then given to the decoder. The decoder will use the same table. It will be able to get to No. 3 because it has a unique mapping in the table. It will get transformed 01 into 1 because that has unique mapping.

However, when it comes to 0001, it will not know how it was encoded. It -- it could be 4, or it could be 5, and, therefore, the property uniqueness, which is mentioned in Huawei's construction and reflected in the Court's construction would avoid this problem.

And the reason our expert mentioned is simple. Each variable length code within the VLC table is not a unique association. If that is not true, then the decoder will not be able to recover the original value that was encoded.

On that one, the expert for PanOptis gave a declaration in Paragraph 28. He gave various examples of variable -- variable length coding schemes, Huffman coding,

Golomb coding, Unary code, and so on.

And expert for Huawei examined each of those and concluded that in each of those examples, the variable length code was unique, and the unique mapping between the coefficients and the -- I think that's all I have to say on this one, Your Honor. Unless you have any questions, I will sit down.

THE COURT: So is your difference with the preliminary construction that it does not reflect the "and vice versa" that you believe should be in it?

MR. SHARMA: Yes, Your Honor. I think everything else will be correct over here.

THE COURT: All right.

MR. SHARMA: And the reason is because that's how a person skilled in the art would understand a variable length code table to be, and that's how it is described in the patent, that the encoder uses a table, and the same table is then used -- used by the decoder to encode it. And that will reflect the core understanding and meaning of variable length code table.

THE COURT: All right. Thank you, Mr. Sharma.

MR. DEZERN: Your Honor, David DeZern for Plaintiffs.

May I approach with notebooks?

THE COURT: Yes.

MR. DEZERN: May I proceed, Your Honor?

THE COURT: Yes.

MR. DEZERN: First off, I would like to state that PanOptis would be willing to accept the Court's preliminary construction. It adopts PanOptis's construction and adds the additional language, which I believe resolves one of the issues between the parties.

As you're aware, the parties propose competing structure -- excuse me, competing constructions for the "variable length code table" term presented here.

And as was explained in the briefing, there were two areas of disputes, the first being Huawei's requirement that the variable length code be unique, and the second being the perspective of it being from the encoder versus the decoder.

I believe the Court's preliminary construction, which adds "within a given table, each variable length code is unique and maps to one unique value" resolves the unique between the parties and seems to be consistent with both parties' understanding of how the claimed invention works.

So addressing the issue of the perspective of the variable length code table, Huawei's admitted that the -- that Claim 1 is directed to a decoder. The variable length code table used in Claim 1 is used to transform variable length codes into numbers, not the other way around.

And I believe this is evident from this excerpt of Claim 1, which presents in -- in yellow highlight the two places where the disputed term "variable length code table" appears. And as you can see, as part of a coefficient number decoding unit, it's configured to decode to obtain a number of non-zero coefficients.

The variable length code is used as part of that coefficient number decoding unit, and the purpose in -- in the claim is to convert variable length codes to numbers and not the other way around.

THE COURT: Are there other claims that are asserted that use this term from the other perspective?

MR. DEZERN: No, Your Honor. Claim 1 is the only claim in the '238 patent.

THE COURT: All right.

MR. DEZERN: And I believe your question to Mr. Sharma hit the -- hit the issue exactly on the head, that -- that the -- the claim is directed to the decoder where variable length codes are transformed into numbers, not the other way around.

Huawei's position that it's the same table I don't think is quite accurate. It is -- it is necessarily the same mapping. The -- the encoder must map the number to the variable length code which the decoder is then able to understand. But it's not exactly the same table. One table

is in the -- the encoder, which maps it, and another is in the decoder, which decodes the variable length code.

And the claim is directed to the latter, and that's why I believe the Court's preliminary construction adopting PanOptis's proposed construction is drafted in the correct direction of an encoder and the additional language regarding within a given table each variable length code being unique resolves the other issue.

THE COURT: Do you contend that the two tables would be different?

MR. DEZERN: Well, I contend the -- the mapping would have to be the same. But they're not -- they're not the exact same table. You -- if you went to go find one, one would be in the encoder, one would be in the decoder.

THE COURT: And would they be -- even though they are located in two different places, would they be the same table?

MR. DEZERN: Not necessarily. I don't believe there's any requirement that they be arranged or presented in the same way. So long as the value that's transformed to the variable length code can be transformed back to that value, I believe that's -- that's all that -- that would be implied.

THE COURT: All right.

MR. DEZERN: So unless you have any other

questions, Your Honor --

THE COURT: No. Thank you, Mr. DeZern.

Mr. Sharma, why should we construe this term to include both the encoder and decoder perspective?

MR. SHARMA: Your Honor, if I may switch the slides.

Your Honor, as shown in all the examples over here, the -- although the claim is drafted as a decoder, it draws heavily on how the encoder works. The code -- the variable length coding unit, if I go back here, the coefficient of the decoding unit, that's the limitation of which the two terms a part of, it receives a coded stream, which is generated at the encoder side. So even though the claim by itself is on the encoder/decoder, it relies heavily on what had been done on the encoder and reverses this process.

And every example that is shown in the specification shows -- and over here, even though I said same table is used on both encoder/decoder side, I meant was the mapping on the encoder side as shown as Code Table 3 and VLC Table 3 in this example, same mapping will be maintained on the decoder side.

Obviously, you could have replicas of the same table on two ends or the same mapping between the coefficients and VLCs at both ends, and that --

THE COURT: But each claim doesn't have to cover

all of the embodiments. This claim is drafted from the decoder perspective. So why do we need to include in it the encoder embodiments?

MR. SHARMA: Your Honor, let me clarify. It is not as much the encoder embodiments but making sure that the same mapping process is being used on the encoding side so that the decoder can undo the decoding process.

Just to give you an example from the Plaintiffs' expert, Plaintiff expert gave an example of how the encoder uses VLC Table No. 2. This is from Paragraph 30 of the Plaintiffs' expert. And it mentions that, okay, now then to decode that value, its has to use the correct VLC table and mentions that you either use the VLC Table 2 to encode it -- to decode it. If they use VLC Table No. 3 to decode it, then you will get the wrong value.

But, yes, I think the -- you don't have to -- to include the table at the encoder side, but you have to use the concept of mapping, the same mapping is being used in the encoding, and the same mapping is used to decode the value, that's part of the claim, because it is encoding a stream that was -- it is decoding a stream that was encoded on the encoder side.

THE COURT: Okay. I do understand your argument. Thank you, Mr. Sharma.

MR. SHARMA: Your Honor, if you don't mind the next

term is --

MR. DEZERN: Please proceed.

MR. SHARMA: Your Honor, the next term is also from the '238 patent. And it's a longer phrase. It refers to a coded stream that was generated by quoting the number of non-zero coefficients included in the current block. And how this construction explains or clarifies that, when the decoder stream was created, it used only the number of coefficients that were converted into a variable length code. And all this process happened on the encoder side.

Even though the word "only" does not appear in the claim language, somebody reading the patent and the specification would understand that when this coded stream was created for decoding, the coded stream included only one value, and it was total number of coefficients which were then converted into a bit -- a coded stream using VLC tables.

Here -- the larger phrase over here. The bigger phrase is coefficient number decoding unit. That's a unit on the decoder side that will decode the number of coefficients. It has three different units. There's a determining unit, which makes a prediction; a selecting unit that selects a VLC table, that's a table that will be used to decode, and as the invention works, same table or a sim -- or a table of same mapping would have been used on

the encoding side; and then the last element is the variable length decoding unit that is con -- configured to perform variable length decoding on a coded stream.

And the issue is what does this coded stream contain? And this coded stream was generated by coding the number of non-zero coefficients in the current block.

So since the coded stream was created on the encoder side, I want to first show how the coded stream was created.

This is Figure 8C from the patent which describes how the coded stream was created on the encoder side. The -- on the left-hand side is coefficient number. These are the total number of coefficients that applicant coded -- provided to unit 206.

The second input, unit 206 is a VLC table selecting unit. That unit 303 provides a selected VLC table, variable length coding table, to 206. And based on that, it outputs a coded stream. And that is then sent over to the decoder.

So the coded stream that is mentioned in the claims refers to the output of unit 206, which is coefficient number encoder because it's present on the encoding side.

THE COURT: Doesn't PanOptis contend that this coding can also use surrounding blocks to make a prediction?

MR. SHARMA: Yes, Your Honor. So if you look at the coefficient -- the unit 201, that's a predictive value

calculating unit. That unit -- we look at number of non-zero coefficients in surrounding block to make a prediction, and those are sent separately. Those are already present in the coded stream.

So what happens, Your Honor, you are getting a series of blocks, and each block, some part of the information will contain the total number of coefficients as they come in. The decoder will save that information for later use. So you're getting a series of coefficients from the encoder side, the decoder will keep decoding them and keep saving them for exactly the purpose Your Honor alluded to.

THE COURT: And would your inclusion of the word "only" in the construction allow that?

MR. SHARMA: Yes, Your Honor.

THE COURT: Why do you need that word? I am always suspicious of an effort to include a limiting term like that in a construction unless I understand what it is your concern may be understood if we don't emphasize "only."

MR. SHARMA: Yes, Your Honor. That's a fair point. And we also agonized over the issue whether putting the word "only" in the claim.

Your Honor, the way the invention operates and all the embodiments operate, they operate -- in this limitation, coefficient number of decoding unit on the coded stream, and

that coded stream contains only non-zero coefficients.

Now, the data that comes in from the receive -- from the encoder side that you receive can have multiple other things, and those things I'll show you in a minute are handled by different units.

So our construction clarifies that the unit, which is the coefficient number decoding unit, what does it handle, what is input to this unit, and what it outputs from that unit. There may be other things that are input to the decoder, but they're handled by different units.

So our construction clarifies to what's obvious to one of skill in the art is the coefficient number encoding unit or the decoding unit is receiving number of coefficients which have been encoded and transforming back then into the coefficients.

And if you look at the -- the description -- Your Honor, do you have another question before I move on?

THE COURT: No, go ahead.

MR. SHARMA: Yeah. So if -- in the description of Figure 8C, it mentions that the coefficient number encoder 206 -- that's present in Figure 8C -- directly transforms the number of coefficients into a variable length code.

So in this case, it is transforming the coefficient number into a variable length code based on the VLC table that is given by 303.

And now the VLC table was created or selected based on the input from unit 201, this predictive value calculating unit, and that made the decision based on the number of non-zero coefficients and surrounding blocks.

But all the input that is coming on the -- input that is coming into VLC are the coefficient numbers, and the only output that comes out of it is series of VLCs that encoded those coefficients.

And if you take a step up and look at the whole encoder, the coefficient number encoder that we were just discussing in the previous slide, this Figure 8C, is unit 111 highlighted in yellow, and that outputs the coded stream. The coded stream is the claim term that defines the stream that we're discussing about. And that was generated by the encoder.

Now, the other units over here, coefficient value encoder 112 and inter-picture predicting unit 107, they also create values that are sent over to the decoder. All these different inputs are combined in the bit stream generating unit and sent out to the decoder, which are shown in different colors over here.

Yeah, so -- so to the extent PanOptis agrees that the bit stream can contain many values, that is true. The bit stream that goes out of the encoder contains many values, however -- however, the output of the coefficient

number encoder 111 is the counterpart of the coefficient number. Decoder contains only number of non-zero coefficients that have been encoded into variable length code.

Now, if you come to the decoder side, the same input arrives at the decoder, and there's a counterpart over here, the bit stream analyzing unit 1401. It takes a bit stream which has different values. It has number of coefficients that have been encoded. It has the values of coefficients that have been encoded. It also has motion vectors. And the bit stream analyzing unit will send appropriate data type to different units.

The total -- total number of coefficients -- that's the term we are discussing over here in yellow -- is shown to send to coefficient number decoder that will decode the number of coefficients, the VLCs to get the values.

Other things in data streams, such as coefficient values, those are sent to unit 1404 that will then decode coefficient values. Finding motion vectors and so on, they are sent to the inter-picture prediction decoder 1408.

So I'll admit to the extent -- and Pan -- PanOptis is correct, the bit stream that comes in has many, many values and so on. However, I disagree -- I will disagree from PanOptis that the -- all those values are then given to the coefficient number decoder. Those values are parsed by

the bit stream analyzing unit, and the -- only the number of coefficients are sent to the 1403, the coefficient value decoder.

Your Honor, this is simply a text with -- just -- simply with a lot more words to state.

THE COURT: Is the part that you have just walked me through from the specification --

MR. SHARMA: Yes.

THE COURT: -- that is an embodiment of this invention, but is all of that reflected in the claim?

MR. SHARMA: Yes, Your Honor. The only portion that is captured in the claim -- first of all, all the embodiments in this invention work in the same manner. The claim at issue is coefficient number decoder that is captured in 1403. The -- the decoding part of how the coefficient value decoder works, 1404, or how the inter prediction decoder works, 1408, those are not explicitly called for in that -- in that claim.

The claim at a whole at a high level captures how the decoder would work, but the -- but the limitation issue is what does coefficient number decoder do, and that's what we're trying to focus on is -- is what -- in the claim term, what does a claim term receive and what does a claim term decode and how the decoding is done.

THE COURT: All right.

MR. SHARMA: And here, Your Honor, I have excerpted the coefficient number decoding unit from the claim. The claim, as you know, Your Honor, is about a column long, but the -- all the claim terms that we're discussing over here are about coefficient number decoding unit.

That, Your Honor, is actually the key part of the claim. A lot of the description of the encoder/decoder work, the patent -- the background were known in the prior art, block level coding, discrete post sine transforms, all these were present in the prior art.

The novel part of the patent was taking coefficient numbers -- the total number of coefficients in a block and encoding them, sending them over, and decoding them. And that's what they claim specifically because that, they believe, to be the key part of the invention.

So looking at the claim term over here, Claim -- coefficient number decoding unit, that unit maps to unit 1404 -- 1403, coefficient number decoding unit at Figure 17.

And as mentioned earlier, this has three different parts. The variable length decoding unit, which is a unit within 1403. It receives a coded stream that was generated by coding the numbers of non-zero coefficients in the current block. And that's the part which is highlighted in yellow.

As you saw earlier, in the encoder side, there was

a corresponding coefficient number encoder that received only the number of non-zero coefficients and converted them into variable length streams using the table.

The thing was sent over, along with other bits of data. On the receiver side, the bit stream -- bit stream comes in and is parsed out. And 1403 is the unit that corresponds to that.

Now, if I go look inside 1403, Figure 20C shows how the decoder works on the -- on the decoding side.

And the same process is repeated over here. There is a predictive value calculating unit that Your Honor mentioned earlier that will decide by looking at other surrounding coefficients what table to use. 1603 will select the table, and coefficient number decoder will then transform it.

Now, the coded stream that was created on the encoding side, which is based only on number of coefficients, is provided to unit 1506. And the patent states the coefficient number decoder 1506 transforms directly a variable length code into the number of coefficients without transforming them into code number.

So in this embodiment, it will take the variable length codes, use the table, and output a coefficient number. All the embodiments in the patent use the same process. They may use code tables. They may not use code

tables. But they all use variable length code tables.

And in our embodiment, the bit stream coming into this decoding unit has only one thing, the variable length codes that have been -- that are based on the number of coefficients. And output from the unit is only one thing, that's coefficient numbers.

And our construction simplifies or clarifies that issue, how this unit is working.

And as I mentioned earlier, one of the -- the -- the critique that Pan -- PanOptis has is, well, the bit stream can contain many, many other things. And that is true, but that's not the claim term at issue. The claim term at issue is coded stream and how that coded stream was created. And they've shown that coded stream was created in yellow by using only number of coefficients sent over, along with other data, and then the -- at the coefficient number decoder, that's the claim term at issue again over there, that receives only the coded stream and does not receive other portions. And those are handled at other units in the embodiment such as the coefficient value decoder or the inter-picture prediction decoder.

Okay. One last thing, Your Honor. In the opening brief, PanOptis mentioned that this is a comprising claim and can have other things. And that is true, the comprising claim can have other things like may include coefficient

value decoder. They can also have a coefficient -- inter-picture prediction decoder.

However, the case law is clear that even though you may have other limitations, but the limitations that are drafted that are present in the claims cannot be modified under the guise of comprising limitations.

That's all, Your Honor. Do you have any questions?

THE COURT: No. Thank you, Mr. Sharma.

MR. DEZERN: Your Honor, before I begin, I believe I miscounted and handed up all of my notebooks to the Court instead of saving one for opposing counsel. And if I could beg to get one on those back.

MR. NIEBERG: We'll take ours back.

MR. DEZERN: Okay. Yeah. Well, we could trade, however -- however you prefer.

I apologize.

May I proceed?

THE COURT: Yes, go ahead.

MR. DEZERN: Right here. Your Honor, as Mr. Sharma was just discussing, the only difference between the parties' two proposed constructions is that Huawei wants to add only to this description of the disputed term "generated by coding."

Here's the context in which it appears in the claim where it describes the coded stream.

I believe that the problem -- the main problem with Huawei's position of "only" is that they're essentially reading in parts of specific embodiments from the specification into the claim.

So here we have Figure 17, which is an embodiment of the decoder in the '238 patent. And in this embodiment, there's -- there's a block diagram of different parts, and it includes Section 1401, the bit stream analyzing unit, which I believe Mr. Sharma was just discussing which is described here in the specification where it explains that this -- this bit stream analyzing unit extracts from the input bit stream various types of information, including the number of non-zero coefficients, the values, motion vectors, et cetera.

Now, the -- the '238 patent presents this as a potential structure for the decoder, and then goes on to describe embodiments of -- embodiments that decode the number of non-zero coefficients based on this extracted stream.

But the problem with Huawei's construction is there's nothing -- there's nothing in the claim that requires that extraction from the inputted bit stream to be provided -- to be part of the coded -- coded stream.

So -- and I think in their briefs, and we heard again today, that -- that Huawei's acknowledged that,

generally, the -- the generic bit stream that is provided to the decoder includes a lot of different information.

And, you know, Huawei's position is that this claim language describing the coded stream means that this coded stream is generated by coding only the number of non-zero coefficients.

Whereas, our position is that the claim language only requires the number of non-zero coefficients -- I'm sorry, no. Our position is that it at least requires the number of non-zero coefficients because it is part of a unit which is -- as you see at the top, is configured to decode to obtain the number of non-zero coefficients. Therefore, at least that information must be in the stream, which is provided to it, but the claim language doesn't exclude anything else or require these other details from the embodiments in the specification.

So unless Your Honor has any -- any questions, I'll sit down.

THE COURT: All right. Thank you, Mr. DeZern.

MR. SHARMA: I just wanted to make one quick point, Your Honor.

The -- the claim is extremely long, has many units, multiplexing unit, audio processing unit, picture decoding unit, and then block decoding unit and a reproducing unit. But, finally, the claim boils down to what is key part of

the invention, coefficient number decoding unit. And all the embodiments of the patent, every one of them on the encoding side and the decoding side, show that the coefficient number encoding unit and decoding unit handle only the number of coefficients. There's no description in the specification of these objects handling anything else except those.

And, finally, the claim term says variable length decoding units configured to perform variable length decoding, and it has to be read in the light of the specification. It takes in the number of VLCs and transforms them into the number of coefficients.

And if there were something else, it added -- other things went into unit 1403, then coefficient number decoder would not work. There's no description in the specification or -- or in the background that if it handled other values, if -- if it got motion vectors, if it got value to the coefficients, how would it decode them? The unit is not configured to operate that.

Our construction clarifies that, and any confusion down the road in case the Plaintiff would actually -- would like to argue that coefficient number decoder can accept other things besides number of coefficients.

THE COURT: I'm -- what I'm understanding, really, is that this dispute is about whether something can be

identified within an accused device as a variable length decoding unit if it does more than just decode based on the -- the number of non-zero coefficients and what is claimed in here.

MR. SHARMA: Yes, Your Honor, I think you hit the nail on the head. The issue is going to be is -- is the accused product will have something which is number of coefficients, other things. Things have changed, constantly evolved, and will it be capturing other things, which is not in line with the specification or the invention or the patent described as the key part of the invention.

In the background and the last column, they describe key part of invention is taking total number of coefficients and putting them into VLC, and then decoding them on the reverse side. And that all -- every specification -- every embodiment operates in that manner, so they have implicitly defined coefficient number decoder to that embodiment.

THE COURT: All right. I will consider your arguments in that light. Thank you.

MR. SHARMA: Thank you, Your Honor.

MR. HASLAM: I want to address the ordering vector. I know we put the interleaver limitation both in the ordering vector and the reordering circuit. I'll argue it in connection with the reordering circuit.

The reason for doing them both is -- I think this came through our papers -- is that we believe there is a clear and unmistakable disclaimer of interleavers, and perhaps reordering circuit is the best place to put that, so I -- I --

THE COURT: That's fine.

MR. HASLAM: Okay. Our concern with the Court's preliminary construction on ordering vector is that it gives no meaning to the term "vector," which we believe is a one-dimensional array of numbers. And if -- if the Court were to modify its construction to say one or more ordering patterns that form a one-dimensional array of numbers that together define a reordering of the bits of the mother code word, we'd be happy with that.

THE COURT: And what do you rely upon for arguing that vector has to be one dimension?

MR. HASLAM: Both a declaration of Mr. -- Dr. Bims and the dictionary definition of vector. And I think it's particularly important to make sure that we give meaning to the word "vector" because of how it came to be in the claims.

Can we go to Slide 51 first?

If we look just at the bottom part here, this was the -- there was a rejection over Li and two other references to the claim which originally just had the term a

reordering circuit for reordering the mother code word and regenerating a reordered mother code word. To get around those three references and with respect to Claim 1, to get around the Li reference, they specifically added an ordering vector.

So I think it is important that we give meaning to the term "vector," and I don't believe it does. And if we want an example of what a vector is and -- and where the specification -- and it does say it with respect to a preferred embodiment, but I believe, consistent with the expert declaration, it's what a person of ordinary skill would understand.

If we can go back to Slide 50.

Here is the top of Column 7, and it -- it talks about the one or more puncturing patterns used sequentially. Those patterns, put together, form the ordering vector. And when it gives the exemplary ordering vector given below, what it means by exemplary there is, is that's what the vector -- the ordering vector would be if you used the puncturing patterns which are immediately described before in Column 6 -- at the bottom of Column 6.

And -- and when you look at those puncturing patterns, at the bottom of Column 6, what you'll see is P1, P2, and P3 that are a series of 1s and 0s which were -- which basically specify the 1s mean you keep that bit in

that order -- in that place, 0s mean you don't.

And the combination of those three, P1, P2, and P3, if you look at them in the bottom of Column 6, you will see that the combination of those three has a 1 in every position, which indicates that it will keep ultimately every bit of the original stream, but it will be reordered as set forth in Column 7.

So the reordering will be Bits 1, 4, 7, 10, et cetera, 2, 5, 8, 11, which is a reordering that is done by the puncturing pattern. But the pattern goes to make a vector. And I think that's what's missing from the Court's construction is a term which they used to distinguish over the prior art is -- is a -- a mathematical term. We've given dictionary and -- and other definitions, as well as the expert declaration, that it is a linear array of numbers. It can be a column in a matrix. It can be a row in a matrix, but it is a linear array of numbers which tells you where to start and where to stop in the bit stream. And it tells you the order in which those terms are to be given to the modulator.

And so I think for those reasons, we -- we believe that the -- definition does not give effect to the term "vector," which is a term of -- of art, I think, not one that is -- when given an ordinary lay stream (sic) meaning. But even if you look at the dictionary definitions, it's a

one-dimensional array of numbers, which can then be used to reorder as these puncturing patterns, when they're put together, accomplish.

THE COURT: Does the specification anywhere talk about a one-dimensional nature of this?

MR. HASLAM: Those terms do not appear in the specification, but if you look at the -- the only place that it gives an example of an ordering vector is at the top of Column 7, and there it is, a one-dimensional array of numbers, which tells you which bit is first, number one, and then the order in which those bits are to be sent.

THE COURT: What is there in the specification that would indicate that a multi-dimensional ordering vector couldn't accomplish the same thing?

MR. HASLAM: There is nothing in the specification that says it can.

THE COURT: All right. I -- so the argument is simply that because there is nothing to the contrary in the specification, we should include?

MR. HASLAM: No. It's because the example that's given is consistent with the meaning of what a vector is. The term "vector" has a meaning. We've given you dictionary definitions. We've got an expert declaration that a vector has a meaning in the art, and it's a one-dimensional array of numbers.

THE COURT: It was my recollection that your dictionary definitions did not all include this one-dimensional nature.

MR. HASLAM: Go to Slide 54.

The first one is a -- a matrix with one row or one column. One row or one column is a one-dimensional array of numbers. If you have a matrix that's 3-by-3, and it's one column, it's -- it's the order 1, 2, 3, if you go across the row. And if it's down, it's whatever is 1, 5, 7, or whatever the matrix -- size of the matrix is, it's a one-dimensional array of numbers going down.

It is not a two-dimensional array or a four-dimensional array or a six-dimensional array, because you're not sure where you're supposed to start and stop which is one of the benefits that's touted in the specification for using this reordering -- this ordering vector to create the reordered mother code word.

One of the things it says is, is that allows the -- the transmitter to pick where it starts and stops within the sequences, as it has to send more and more sequences if it has to retransmit.

A mathematical expression quantity, such as velocity, that possesses both magnitude, amplitude, and directions; a set of numbers in an order; in an order. And we believe when you put those two together, the order is --

it's a -- it's a one-dimensional order. It's not a matrix. A one-dimensional array -- the last one is a one-dimensional array. A set of items arranged in a single column or row.

But I think the dictionary definitions we've provided contain the -- the element that it's a one-dimensional array of numbers.

Now, the one-dimensional array can be a column in -- in a matrix. It can be a row in a matrix. But it -- as these things say, it's one-dimensional so that it has an order and a direction.

And that's -- that's consistent with what's in Column 7. And it's consistent with the way the invention is described as to reordering in such a way that the reordering vector tells -- sets the order of bits that are to be modulated. In other words, this is what sets the order which -- which will go to the modulator, which is then responsible for -- in this reordered order, set by the ordering vector, that's the order the bits go to the modulator, and that's the order in which they go out over the physical airways.

And in the Column 7 embodiment, the way they would go out is 1, 4, 7, 10, in that order. And the concept of vector is it has an order to it. And it's a -- it's a one-dimensional array or column or however the Court wants to capture it. But I believe that the current definition

does not capture or give meaning to a term that was specifically added during prosecution to overcome prior art.

And if the Court has any further questions --

THE COURT: Not -- not on that part of it, no.

MR. HASLAM: Okay.

MR. BURGESS: I guess we can do it like this. It's half the term, but -- we'll talk about the split first.

Thank you, Your Honor. May I proceed?

THE COURT: Yes.

MR. BURGESS: Could I have -- slides -- yeah, could I have Slide 39, please?

Let me just start, Your Honor, with the -- Huawei's suggestion that the prosecution history somehow supports this construction. It doesn't.

It is true that the ordering vector limitation was added in the prosecution history to distinguish three different references, Li, Eroz, and Kleider. We'll talk more about those later with respect to their disclaimer argument.

But the important point here is that the -- the one-dimensional nature that Huawei is proposing as part of the construction has nothing whatever to do with any of those distinctions. There's no mention anywhere in the file history of -- of the ordering vector being one-dimensional, or, in fact, of anything about the ordering vector other

than that it's used to reorder the mother code word.

Now, I think actually the dictionary definitions that Huawei cites are quite instructive. So I only remember two from the briefing, but there was a third, and I'm going to ask them to bring up one of their slides in a minute because I noticed something that I want to point out to the Court.

But here's the first one, and this -- this is the one that actually bears the closest resemblance to what they propose. And -- and they -- they cite to the Microsoft Computer Dictionary definition of vector. And in their brief, they highlight Definition No. 3, which starts with: In data structures. So first of all, this is not a computer patent. This is a telecom patent.

Second of all, there's no suggestion anywhere in the patent that the particular data structure that's used to represent the ordering vector and memory has any significance. There's just -- the patent is completely agnostic. It -- it just doesn't matter.

And so this is just a wrong definition.

But if we look at -- sorry, there's -- if we look at the -- the telecom -- oh, this is yours?

MR. HASLAM: Yeah -- no, that's yours.

MR. BURGESS: No, it's mine.

If we look at the Telecom dictionary definition

that they also cite in the same footnote of their brief, this is actually, I think, directly contrary to their position. Because if you look at this -- again, this is telecom, that's actually what this patent relates to -- not a single one of these definitions suggests that there's any significance to the particular way that a vector would be represented in memory in terms of being a one-dimensional array or -- or any other type of structure.

And, in fact, if you look at -- and what I've highlighted here is actually what Huawei highlighted in the footnote in their brief where they discussed this definition, a set of numbers in an order. Well, that's all that matters.

The ordering vector needs to be a set of numbers in and order, and that order is what's used to -- to reorder the mother code word. And that's -- that's what the ordering vector does.

And -- and I believe they say that there's no concept of order in the Court's proposed construction, or a -- vector in the Court's proposed construction. I don't think that's right. I actually believe that this concept of -- of a set of numbers in an order, that's exactly what a pattern is. That's what an ordering pattern is. It's a set of numbers in an order, and that's -- that's all that's required. And that's -- that's what a vector is.

If -- if I could ask you to switch over to your slides and -- and pull up your Slide No. 94 (sic). Yeah.

I hadn't seen the -- the top definition before, which was from the Oxford English Dictionary. And, of course, they -- they highlighted the part that's math when this isn't -- not really a math patent either. But if you look at the -- the second part that they ignore, that's actually very instructive. Any element of a vector space.

So in telecom, for example, a vector space could be -- in fourier analysis, in telecom, a vector can be a function, right? It's an extremely -- it's an extremely broad concept, and the notion that somehow it's limited to a one-dimensional array, a particular data structure, that -- that just -- that's just sort of orthogonal. It just doesn't -- it doesn't fit here. Maybe it fits in computer science when you're talking about how you write an algorithm in the most efficient way. But it just doesn't make sense in the context of a telecom patent.

I think that's all I have, Your Honor, unless you have questions on this part of the dispute.

THE COURT: No. Thank you, Mr. DeZern (sic).

MR. HASLAM: I have just one quick rebuttal.

The notion that this is not a computer-implemented invention and that it somehow deals with telephony, if they're prepared to stipulate that this doesn't read on

computers, we could probably all go home right now, but he's not going to stand up and say it doesn't, because what's in the -- what's in the phone and what implements these is a computer.

And so -- and these are data structures. I mean, the notion that this is not a data structure when it -- when it basically is -- it is a set of numbers that are -- a puncturing pattern is contained somewhere in a memory so that a processor that then wants to do the reordering can go to that memory and pull out this data structure which contains these puncturing patterns.

But -- but I just close with Column 7 says that the puncturing patterns form the vector. The vector is not the puncturing pattern itself. It's the series of puncturing patterns that forms the vector. And the vector is, we believe -- notwithstanding the arguments, is a one-dimensional array of numbers, as -- as indicated by the specification.

THE COURT: All right. If you want to go ahead and address the interleaver issue.

MR. HASLAM: Put up Slide 38, yeah.

On Slide 38, I've -- I've put up what was the original claim language, the reordering circuit for in -- for reordering the mother code word and generating a reordered mother code word.

Now, that's a circuit -- and that -- it's a circuit in a telephone admittedly, but it's a circuit that does computing operations.

The examiner, with respect to Claim 1, said Li substantially teaches, et cetera. And -- and with respect to the reordering circuit, the examiner said: Li has a bit-by-bit interleaver, which he called the reordering circuit.

So the examiner matched the bit-by-bit interleaver, which is a structure in Li. And he said that structure is a reordering circuit for reordering the mother code word and generating a reordered mother code word.

And he -- and what the examiner specifically said is Li has a bit-by-bit interleaver, paren, quote, a reordering circuit, close quote, close paren, interleaving the code word received from the encoder and outputting an interleaved code word. Then he gives a citation in Li. An interleaver mixes or reorders the bits. And it does so, so that it can help overcome what are referred to burst errors, which are errors which will occur close together in time, so that it might wipe out a series -- a -- a consecutive sequence of bits. And by interleaving them, using forward error correction, you can help mitigate the effects of such burst errors.

The -- and the examiner went on to cite with

respect to the other claims, the other two, Eroz and Kleider, both of which had interleavers.

So the examiner, for all the claims that were then pending, cited a reference and found a reordering circuit for reordering the mother code word and generating a reordered mother code word was an interleaver.

THE COURT: How would the statements of the examiner constitute a disclaimer by the patentee?

MR. HASLAM: Because the -- well, because when they came back, they amended the claim -- it's the fact that they amended the claim, and the arguments they made over the -- to try to get over it.

So number one, they didn't argue -- they didn't not amend the claim and argue that Li's interleaver was not the reordering circuit. They -- that was an argument that was available to them.

Examiner: You've got it wrong. Li's interleaver is not a reordering circuit for reordering the mother code word and generating a reordered mother code word.

That's essentially one of the arguments they're making now. Well, we didn't have to say or didn't have to amend the claim. The fact of the matter is they amended the claim, and they amended the claim -- if we can go to the -- maybe it's the next slide. They amended the claim to add the wherein clause that I've highlighted.

So the first thing is, is they didn't say Li's interleaver is not a reordering circuit. What they did say is Li fails to teach, suggest, or -- and -- and what's important here is this argument is made with respect to the amended claim. These arguments are made with respect to the amended claim, not the original claim. They could have tried to make these arguments with the original claim and said, look, Li just is -- is apples and oranges to our -- our reordering circuit. They didn't. They amended it. And these arguments are distinguishing features of Independent Claim 1, as amended.

They go on, and they say: Li fails to teach, suggest, or render obvious a reordered mother code word that is generated based on an ordering vector, wherein the ordering vector -- and then they cite the claim language. So they distinguish it based on the fact that Li's bit-by-bit interleaver is not an ordering vector or a reordering -- or an ordering vector.

They say: In contrast, Li's interleaver breaks a correlation of sequential fading coefficients, maximizes the diversity of the system, and breaks the correlation among sequentially-coded bits and the correlation among the bits associated with the same seven symbols.

So they said basic -- they basically said this is what Li's interleaver does. It's not a reordering -- it's

not an ordering vector. It doesn't meet the amended claims with respect to the reordering based on an ordering vector.

They don't make the argument that Li's interleaver is not a reordering circuit for reordering the mother code word and generating a reordered mother code word. They rely on the ordering vector.

Let's go to the next slide.

Now, the patentability of an apparatus claim depends on the claim structure, not the use or the purpose of that structure. It covers what a device is, not what a device does.

It must distinguish from the prior art in terms of structure rather than function.

What they distinguished in the arguments they made to the Patent Office were based on the -- the function of Li's interleaver. And, in fact, they were accurate as to what Li's interleaver did. And as our expert, Mr. Bims, said, that is what every interleaver does. It reorders the bits in order to break up the sequential nature of the bits to overcome potential burst errors in transmission.

Next slide.

And here I've just said on Slide 42 -- it's in the brief, I won't bother to read it -- it's Paragraphs 51, 56, and 63 from the declaration of Harry Bims, indicating that what they distinguished it on is applicable to every

interleaver. And, in particular, what they -- what they said Li's purpose was, was, in fact, the purpose of the by-by-bit interleaver in Li.

So by -- whether they distinguish it by saying we're not a bit-by-bit interleaver, or in Li, in contrast of the reorder -- the ordering vector, does this, they essentially said we are not a structure that does those things. And what those things are is what Li's bit-by-bit interleaver did.

Go to the next slide.

What they essentially said is that they took the purpose of a bit-by-bit interleaver, and they distinguished -- they said, well, that's what Li is. And that's in contrast to what we do. But as Li said, he's talking about those purposes are a bit-by-bit interleaver.

So when -- when the -- when the inventors said Li is in contrast to our ordering vector, they effectively, in so many words, said every interleaver is in contrast to our ordering vector, but at a minimum -- at a minimum, what they said is Li's bit-by-bit interleaver, which has the purpose that they then recited in their word -- their language back to the Patent Office, describes Li's bit-by-bit interleaver.

So there is at a minimum, we believe, a clear disclaimer that the ordering vec -- the reordering circuit wherein there's an ordering vector is in contrast to Li's

bit-by-bit interleaver, which breaks the correlation of sequential fading coefficients, et cetera, as they said, to the Patent Office.

And -- and we believe that any person of ordinary skill in the art reading this later would think -- would come to the conclusion at a minimum that Li's bit-by-bit interleaver, which has the purpose which the inventor said is in contrast to our claims, as amended, would clearly say they said we don't do what Li did. So it's not a bit-by-bit interleaver.

Let me see the next slide. Next slide.

I'll just make -- in the interest of time, there are several arguments that -- and I put it on Slide 45, some of the arguments that Optis now makes trying to distinguish Li, and these are things that they might have said many, many years ago to the Patent Office. But they didn't.

Next slide. Next slide.

And here's the problem with the arguments they make today to try to distinguish Li. And we've cited two cases here, Norian Corp versus Stryker and Tech Properties Limited versus Huawei.

We hold the patentees to the actual arguments made, not the arguments they could have made. The question is what a person of ordinary skill would understand the patentee would disclaim during prosecution; not what the

patentee needed to disclaim during prosecution.

The Norian Court says: There's no principle of law that the scope of surrender is limited to what's absolutely necessary. It frequently happens that they surrender more through amendment than what may have been absolutely necessary.

So you can forget the -- the post hoc arguments that they make today about what's different between Li and -- and the claimed invention.

What's -- what matters, what the notice function serves, what people of ordinary skill in the art can rely on is what they told the Patent Office back when they were prosecuting this patent. And the one thing I think is -- is a clear and unmistakable disclaimer in the language of the Federal Circuit is they disclaimed, at a minimum, Li's bit-by-bit interleaver.

Thank you.

THE COURT: Thank you.

MR. HASLAM: If the Court has any questions, I'll be happy to --

THE COURT: Not right now.

Mr. Burgess.

MR. BURGESS: Your Honor, I'm sorry, I forgot to hand these up. Can I bring them?

THE COURT: All right.

MR. BURGESS: Thank you.

About the file history, I think some context is helpful.

As I mentioned a few minutes ago, there were -- in the initial rejection, there were three references that were -- that were cited. Li was certainly one of them. There was also the Eroz reference and the Kleider reference.

And it's noteworthy that all three of those -- in all three of those references, the examiner noted that there was an interleaver. And here we see the examiner -- and we already saw this, so I'll be -- I'll be quick.

But here we the see the examiner's comments on Li where he specifically says: Li's -- Li's bit-by-bit interleaver is a reordering circuit. He clearly makes that link.

Here's what he said about Eroz. He said the -- interleaving the punctured mother code word -- and that's -- that's a function, but he also clearly links that to the reordering circuit, the interleaving function.

Now, what's -- what's interesting is had the patentee intended to do what Huawei says or the applicant intended to do what Huawei says the applicant did, namely disclaim interleavers, he would have simply said just squelch all of this. A reordering circuit is not an interleaver or an interleaver is not a reordering circuit.

But the patentee didn't do that. In fact, took great pains not to do that.

And if we look at the same language that we -- we just saw, I just -- I just have a different -- I read this differently.

The first part of what I've highlighted, the first sentence is simply the patentee saying Li fails to teach, suggest, or render obvious, and then cites the claim language.

And the next sen -- the next sentence says: In contrast, i.e., in contrast to what the claim requires, Li does these things. Li's interleaver breaks a correlation, maximizes diversity, and breaks the correlation among sequentially coded bits in the correlation among the bits of -- the bits associated with the same seven symbols. That's just what Li says. That's just a quote, if I recall correctly, from Li.

And all that's clear here is that the patentee is saying on the one hand, this is what the claim requires, and on the other hand, this is what Li's interleaver does. And they're not the same. And that's all he had to say. There was no need to -- the examiner didn't require any additional -- additional explanation.

The point is, there's a claim limitation. Li's particular interleaver doesn't do it. There's no suggestion

here that interleavers in general would be unable to perform this function. It's -- it's simply -- simply that the way that the interleaver in Li is used, this is what it does, that's different from what the claim requires. That's all that's clear.

Now, Huawei makes much in its brief and also here today of the idea that, look, all interleavers are the same. And this particular way that the patentee or the applicant characterized Li in the file history, that's true of all interleavers.

Well, that's just not true. An interleaver is just a component. What an interleaver does -- and Li says this. We can look at Li. Here's Li. If you look at the fourth line from the top, it says: A random bit-by-bit interleaver permits the order of the punctured encoded -- encoder output bits and -- and then -- and then continues.

So what an interleaver does -- and I don't think there's any dispute about this -- it takes -- it takes a set of bits at its input or symbols at its input, and it reorders them. That's what it does.

Now, the effect that that has on the system depends on the particular system in which the interleaver is used and -- and how it's used within the system.

So in the particular context of Li's invention or Li's paper, these -- these several effects are what you get.

But -- but notice -- notice that one of the things that Li says that his bit-by -- bit-by-bit interleaver does is to maximize the diversity order of the system, okay?

Well, if we go forward a few slides and look at Eroz, and Eroz describes what his interleaver does, and he says it's done to break up the fades and make them appear sequentially independent to the decoder. Well, it doesn't say anything about maximizing the order of a system. And that's relevant simply to make the point that not all interleavers do the same thing.

Eroz is a different sort of system. It's a trellis-coded modulation system. It's different. And so the interleaver has different effects. And so it's just the component that can be used to accomplish many different things.

But giving them the benefit of the doubt and assuming they're right, that all interleavers in the universe do these several things that the applicant describes Li's interleaver is doing -- or that Li describes his interleaver -- even if that's true, there's nothing here that says that an interleaver used in a different system couldn't also do what the claim requires. There's no suggestion of that.

The -- all the patent -- all the applicant is saying here is that in Li, the interleaver doesn't do -- do

what the claim requires. That's it.

And -- and I think that it's telling to look at -- look at what the applicant said about Eroz because, again, in Eroz, we just saw the -- the examiner said: Look, Eroz has got an interleaver. That's the reordering circuit.

But not only did the -- did the applicant not say with respect to Eroz, oh, no, no, an interleaver is not a reordering circuit, just like he didn't say that with respect to Li, didn't mention interleavers at all.

So here's the -- here's the distinction over Eroz. In contact -- in contrast, Eroz appears to make a distinction between required symbols and optional symbols. In Eroz, the required symbols are always transmitted, while the optional symbols are transmitted depending upon channel quality feedback.

And so here, the distinction over Eroz isn't based on the interleaver. It's really based more on -- this is actually really based more on the ordering vector, the idea that you're actually going to transmit all of the -- all of the reordered mother code word, which he's saying Eroz doesn't necessarily do that, and that's the difference.

And, you know, as to the idea that -- oh, I think it's important to recognize that the -- the claims were all amended in the same way. So Claim 1, which was -- which was what -- which was what Li was referenced with respect to,

and then Claim 12, which is what Eroz was referenced with respect to, this same sort of language is added to keep the claims all -- all in parallel.

So the idea that each part of -- each part of this amendment had to sort of carry a certain amount of baggage with respect to each of these limitations I think is just -- just fundamentally misunderstanding what happened.

And I think -- I think that's really it, Your Honor. I mean, the fundamental point is this has got to be clear and unmistakable.

And by -- by mentioning that, I don't want to suggest that this gets anywhere close. I actually think that it's -- all that's clear is that the -- the applicant was saying that here's what the claim does, here's what Li does, they're not the same.

THE COURT: All right.

MR. BURGESS: That's it.

THE COURT: Thank you, Mr. Burgess.

MR. BURGESS: Thank you.

MR. HASLAM: Counsel did put up the slide that had the argument with respect to Li, and he did have a slide with Eroz. Most of his other arguments are arguments that they're making today about the prosecution history, which they didn't make back then. So I want to bring us back to what was actually said.

Li was cited with respect to Claims 1 through 4 or 1 through 5. Li was the only reference cited against those claims.

So with respect to Claim 1, they did add the reordering circuit with the vector. And they distinguished, at a minimum, and I don't think I heard counsel actually really grapple with this -- they really distinguished at a minimum the bit-by-bit interleaver.

THE COURT: You know, my problem with that is if that passage that you read from the applicant's --

MR. HASLAM: Response.

THE COURT: -- response had said Li's device does this, he would not have distinguished all devices. The fact that he referred to that as an interleaver, it does not persuade me that he was saying no interleavers are in the invention. He was characterizing that component as an interleaver, but it -- there's no way that I can draw from that that he's saying that his argument could have ended with interleaver. Li had an interleaver, period. That would be different if he -- but he still goes on to describe the device that would not -- in a way that allow -- doesn't allow me to conclude that he is distinguishing any interleaver.

MR. HASLAM: Let me go to the narrowest first then. Let me put aside for a moment whether the disclaimer is to

any interleaver, and let's just talk about Li.

They -- I think these are undisputed facts. They could have argued, without amending the claim, that Li's interleaver is not our reordering circuit and then told them why. But they didn't do that. They amended the claim.

And then what they said is: Our amended claim which has the ordering vector is contrasted with Li's interleaver which breaks the -- the -- it goes on and says what it is. What he's talking about Li's interleaver is a bit-by-bit interleaver. And I think at a minimum -- if -- if this is all I can convince the Court of, he distinguished a circuit from his -- from the amended circuit that used an ordering vector and said Li's bit-by-bit interleaver, which breaks the correlation, maximizes this, and breaks the correlation among optionally -- among sequentially coded bits is in contrast to my amended claim.

That, I think, clearly says to somebody reading this after the fact, okay, what Li's structure is, because as -- as we indicated, you distinguish on structure, Li's bit-by-bit interleaver which does these things is not our amended reordering circuit.

So at a minimum, they disclaimed bit-by-bit interleavers. Whether the Court is convinced that they went beyond that and distinguished all interleavers, that's -- that's my argument. I understand the Court is not persuaded

by it, but -- but at a minimum, I don't think you can read this and say that they didn't at a minimum disclaim Li's bit-by-bit interleaver.

And with respect to Eroz, they -- the argument that was made today about, well, Eroz was -- didn't do all three of these things, then they didn't have to amend the claims that the examiner cited Eroz against. But they amended every independent claim to add the ordering vector, which I think suggests that when they did that, they were distinguishing at a minimum Li's bit-by-bit interleaver.

Thank you.

THE COURT: All right. Thank you, Mr. Haslam.

MR. BURGESS: Your Honor, can I just have one brief follow-up comment?

THE COURT: All right.

MR. BURGESS: Very brief. Just -- just to follow up on that, at a minimum what they distinguished was Li's bit-by-bit interleaver as used in Li's system because Li tells us what his bit-by-bit interleaver does which is simply to permit the order. It's only when you stick it in his particular system that you get the effects that Li recites.

And so I would agree that they distinguish Li's bit-by-bit interleaver as it's used in Li's system, but that's fundamentally different from the way the invention

works.

THE COURT: All right. Before we go on to the next term, we will take the morning recess, and then come back and continue. Thank you.

COURT SECURITY OFFICER: All rise.

(Recess.)

LAW CLERK: All rise.

THE COURT: Thank you. Please be seated.

All right. Let's move to the next term.

MR. BURGESS: Your Honor, I think that we've agreed that for the reordering circuit, for reordering and generating, that that's -- really the issue we're fighting over there is the same issue we just discussed, so we don't probably need any further comment on that.

THE COURT: I agree.

MR. BURGESS: And, also, we don't feel like we need to talk about gross rate channel. So from the '216 patent, that leaves puncturing pattern, which I'll address now, if that's okay with Your Honor, and then fixed rate -- then fixed net rate channel.

THE COURT: All right.

MR. BURGESS: So, Your Honor, the term here is puncturing pattern, and I think -- I've shown it here in Claim No. 2. It only shows up in a dependent claim. And what I've highlighted here and what I think is really

important context in the claim to understand what the term means. I mean, as -- as Phillips tells us, start with the language of the claim. And the -- and the context here is that we're not using a puncturing pattern in the same way we would use it in the prior art. For example, Figure 3 of the patent. But we're using it to reorder the mother code word as -- as we see, for example, in Figure 5 of the patent.

And the -- the issue that -- that we have with -- with Huawei's proposal and -- and with Your Honor's preliminary construction is the bit about bits to be removed. And I think if we -- if we could bring up the '216 patent, and I can illustrate what I think -- I think, Your Honor, the point that I'm trying to make.

Could I see Figure 3, please?

So here's the prior art. I mean, it says -- it's designated as such at the bottom of the page. And the thing I'd like to call Your Honor's attention to are the three vertical columns, the three stacks. And in the middle of each of those columns, you see there's -- there's puncturing, puncturing pattern P1, a puncturing pattern P2, and there can be an arbitrary number up to N.

And -- no, just zoom back out, please.

And -- and the point is that when that puncturing occurs, bits are removed. And, in fact, if you look at this and you read the corresponding description in the patent,

what you'll see is that it -- after -- after P1 is applied, you don't use the same mother code word because -- because it's not -- the bits have been removed. You actually have to -- to run it through the coding and generate a new mother code word, which you then puncture with P2 and so on.

But the point is that in the prior art system you actually are when you're puncturing, removing bits.

Could we go to Figure 5, please?

But in the -- you can just maybe zoom in on that top big block. Yeah, that works.

But in the -- the claim and -- and the -- the description in the patent of what's being claimed, the mother code word is generated once, as you can see here. And -- and a single reordering vector is used that's formed from puncturing patterns, but those puncturing patterns aren't actually used to remove any bits. Because as you can see here --

THE COURT: They did remove bits from these blocks or subblocks.

MR. BURGESS: Well, okay. In the prior art, Your Honor, as we just discussed, but in -- in the actual -- in the actual claims -- and maybe -- maybe it's -- maybe it's easier to look at one of my slides than to look at this figure.

Let's -- let's look at my Slide No. 80.

So here's -- here's a description. This is from the bottom of Column 6 and the top of Column 7 about how the ordering vector, which is shown on the right, is actually formed. And on the left, we see the puncturing patterns from with -- from which the ordering vector is formed. And -- and the important point, Your Honor, is if you look at P1, for example, you see there's a 1, and then there are two 0s, in the prior art, when that puncturing pattern was applied, the 1 represents that that first bit is going to be selected and the two 0s represent that the second and the third bits are going to be removed or discarded, okay? That's the way the prior art works.

But when P1 is used to form the -- the ordering vector, those two 0s aren't removed. In fact, the first 0 shows up as the 2 that's highlighted in red. That's that bit that comes from P2. And the second 0 shows up as the -- the -- the 3 that's in the brown highlighted bit. It comes from P3. If you put P1, P2, and P3 together, if you superimpose them, none of those bits are being discarded.

And -- and, again, if we go back to -- and I won't do it, but if we go back to the figure, the easy way to see that is you -- you only generate the mother code word once. And the reason you're able to do that is because you weren't throwing anything away. Everything -- everything is used. It just gets shuffled around. It just gets reordered.

So -- so the point, Your Honor, is simply -- and I'll -- I'll stop here. But the point is, is that there's a difference between the way that puncturing patterns are used in the prior art and the way they're used in the invention.

THE COURT: I understand that. My concern is that your -- that I do think this is a term that should be construed, and your proposed construction is far broader than what's encompassed in the pat -- patent. It would include any manner of reordering.

MR. BURGESS: What we -- so we proposed -- we propose --

Can we have 78?

So we've got -- you know, our -- our leading proposal was we don't need to construe this. But, secondarily, we said a -- a bit selecting pattern used to fully or partially reorder the mother code word.

And -- and I think that given the way that a puncturing pattern is used in -- in the invention, which is not to discard bits, that bit selecting patten is a -- is a fair description.

THE COURT: All right. Your -- your concern is just with the implication that not all of the bits can end up in the reordered mother code; is that --

MR. BURGESS: Right. Our -- our concern is that the -- the constructions suggests that there are going to

be -- some subset of the bits are going to be removed. And -- and while that would be true, if we were claiming the prior art in the invention, they're not. They're all passed through. That's how it has to work.

THE COURT: All right.

MR. BURGESS: Should I pass the lectern, Your Honor?

THE COURT: That -- that's fine. I'm just looking for a way to accommodate that --

MR. BURGESS: Okay.

THE COURT: -- that concern. But let -- why don't you let me hear from Huawei, and then if there's anything else you want to add, I'll be happy to consider it.

MR. BURGESS: Okay. Thank you.

THE COURT: Thank you, Mr. Burgess.

MR. HASLAM: The argument you just heard conflates the ordering vector from a puncturing pattern. The dependent claim says where the ordering vector -- and I don't have the claim language right in front of me, but I guess -- it's wherein the ordering vector is based on at least one puncturing pattern, each of the at least one puncturing pattern being used to reorder the mother code word.

And I think if we look at the bottom of Column 6 and the top of Column 7, we see the -- the error, I think,

that infects the -- the Plaintiffs' claim construction.

We are not arguing that the mother code word drops bits. But the specification, when it talks about puncturing patterns, clearly indicates that the puncturing pattern itself keeps bits and removes bits.

P1, as -- as -- as counsel said, where there's a 1, you keep the bit. Where there's a 0, you drop it.

But if you look at this sequence of P1, P2, and P3, you will see, ultimately, there's a 1 in every place. So every bit will be maintained, but in a different order.

And if we go to the top of Column 7 --

THE COURT: So are -- just to make sure we're all on the same page --

MR. HASLAM: Yeah.

THE COURT: -- would -- you don't dispute that, even under your construction, there can be applications where not -- where no bits are removed from the reordered mother code?

MR. HASLAM: That's correct. And that's based on the ordering vector, which we're not talking about here. We're talking about the puncturing pattern.

And the top of Column 7 says, talking about a preferred embodiment, but it says: The mother code word 506 is sequentially punctured using one or more puncturing patterns, P1, P2, P3, through Pn, that together form the

ordering vector. And then it gives an exemplary ordering vector as given below, and -- at Column 6. And that is the mother code word that would contain all of the bits based on an ordering vector that is made up of those puncturing patterns.

But each individual pattern indicates what bits to keep and what bits to remove. And it's the sequence or the grouping of the puncturing patterns that makes up the ordering vector. And the independent claim says: It is the ordering vector which reorders the mother code word.

So we agree that the -- when you use the ordering code word, the ordering vector in Claim 2, which is comprised of at least one puncturing pattern, the end result will be that you have not added or dropped any bits from the reordered mother code word. But Claim 2 is talking about the individual constituents in this dependent claim of what the ordering vector is. And the ordering vector and the vectors that they give the examples of, a puncturing pattern -- as he said, the prior art, the puncturing pattern is it removes bits.

The difference here is between the prior art, the prior art just punctured. Here they use an ordering vector, which they have defined as a combination of or at least one puncturing pattern that simply reorders the bits.

So I think they're -- we're -- they're sort of

mixing apples and oranges between the ordering vector which is comprised of puncturing pattern, but the puncturing pattern itself removes and add -- it keeps and removes bits, the ultimate combination used in whatever your ordering vector -- just keeps all of these bits in a reordered mother code word.

THE COURT: All right.

MR. BURGESS: Your Honor, could I make one comment just to short of address your question about how to accommodate the concern that we have?

THE COURT: Yes.

MR. BURGESS: I would suggest that if we were to take the Court's preliminary construction and change "preserved" to "selected" and "removed" to "ignored," that that would more fairly characterize what actually -- the way in which the puncturing patterns are being used in the invention, as opposed to the prior art.

THE COURT: All right. I will consider that request.

And, Mr. Haslam, if you want to speak to that, go ahead.

MR. HASLAM: Well, it -- it injects an ambiguity as to what needs to be removed. The puncturing pattern -- I think there was -- as counsel said, there's no dispute as to what a puncturing pattern is. He -- he referred to it in

the prior art as something that -- that removes bits. So if it's just going to be that are bits that are ignored, they're not ignored. They're removed. That's what he said the puncturing pattern -- the puncturing is in the prior art. It removed them. That's -- that's what a puncturing pattern does, and that's what the -- all the example -- the one example in the patent is, it ignores them. It's the combination of the ordering vector, which is what puts it back together.

THE COURT: All right. And I take it neither side wants to address gross rate channel; is that right?

MR. BURGESS: That's correct, Your Honor. That's my understanding.

MR. HASLAM: That's correct, Your Honor.

THE COURT: All right. Does that mean that you agree with the preliminary construction, or you just don't want to argue it?

MR. BURGESS: We -- we agree with it, Your Honor.

MR. HASLAM: We -- given the briefing, we agree with it.

THE COURT: Okay. Thank you.

All right. So I assume, Mr. Burgess, your side wants to address fixed net rate channel?

MR. BURGESS: Yes, Your Honor.

So, Your Honor, Huawei has argued and your

preliminary has agreed with Huawei that this term is indefinite.

We -- we disagree, and I'd like to try to sort of resolve the issue down to what we're actually fighting over.

Can I have Slide 74?

This is our expert, Dr. Haimovich's, declaration, where he says that fixed has a well-known meaning and that net bit rate has a well-known meaning. And I take it from Huawei's briefing, and counsel can correct me if I'm wrong, that there isn't really a dispute about that. I think we're all on the same page. And I think what we're arguing about is given -- given the understanding of what that means at what level and sort of the protocol stack -- they make this layers' argument -- at what level do we apply that? And -- and I -- my response to that question is twofold.

Number one, the patent is agnostic to and makes no mention of the concept of layers.

And, number two, the claims in the specification tell us exactly which set of bits need be transmitted at a fixed net bit rate -- or a fixed net rate.

So can we look at 73, please?

So here's Claim 34, and Your Honor will recall that sort of the impetus for the invention here was in the prior art, when we were going to have an incremental redundancy scheme, we have these subblocks that were always of the same

size. And we have to transmit those out. And the patent says: Look, that's not efficient, because in general, the entity that's doing the transmitting doesn't have control over the available bandwidth. Sometimes it will have a big chunk, sometimes it will have a little chunk. And so the innovation is, rather than sending out these fixed chunks, let's take the whole mother code word, reorder it, and then we can bite off as much as we want at -- at each given transmission interval, depending on how much bandwidth we have available. And that's what most of the patent is about.

And what's here on Slide 73 is at the very end in Columns 9 and 10. And this is a different embodiment. And the idea here is that rather than being subject to the vagaries of the network in determining how much bandwidth is available, in this embodiment, the transmitter has the ability to determine the bandwidth. And so what this is about is the transmitter being able to use the invention to set an arbitrary code rate or an arb -- arbitrary bit rate.

As -- as it says in the first block there that's highlighted: To flexibly obtain arbitrary code rates for LA link adaptive schemes on variable rate channels where, i.e., the transmitter controls the occupied bit rate channel. So the transmitter has at least some ability to decide how much

bandwidth it's going to use.

And -- and so in this -- in this context, one of the things the transmitter can decide to -- to do is to always send the same number of bits from the reordered mother code word. And, in fact, if you look at the part that comes in Column 10, the part that's highlighted in yellow and under -- underlined in red, it says: For re -- retransmission, if employed, the same number of bits if the same code rate is desired, more or fewer if not, are taken from the same ordering vector.

And so what this tells you is that one of the things the transmitter can decide to do is every transmission interval, take the same number of bits from the ordering vector and then by extension, also from the reordered mother code word, and that is exactly what the claim means when it refers to fixed net rate channel.

THE COURT: And how -- how do we know that this is what net is referring to?

MR. BURGESS: That -- that this is what net is referring to?

THE COURT: Yeah, the use of the term "net" in Claim 34.

MR. BURGESS: Well -- well, first of all, Your Honor, I would -- I would refer back to our expert's declaration, and also, I think -- I think in -- even in

Huawei's briefing, there's -- there's an agreement that what net means is sending the interesting bits, the information bits, right, that's -- that's what's going to be in the -- the reordered mother code word.

And so I think -- I think even though -- even though the description in the patent doesn't use the term fixed net rate channel, I think there's a pretty good mapping here. You have, for example, the claim referring to at least one quality of service requirement. You've got reference to the same thing that's highlighted in brown at the end of Column 9 here, you've got a reference to desired code rate, the patent refers to suitable code rate or the wanted code rate.

It seems to me we're talking about -- this is clearly the embodiment that's intended to be covered by this claim. And -- and the reference to fixed net rate channel simply means every time the transmitter grabs the same number of bits from the reordered mother code word and transmits those. There's no ambiguity here about which layer we're talking about. That's just a red herring. None of that matters. All -- all this -- it's very simple, it's just saying, every time you grab the same number of bits from the reorder -- reordered mother code word and send those, that gives you a fixed net rate.

THE COURT: All right.

MR. HASLAM: You can leave that up for a moment.

We're talking about a net rate channel, and we heard, basically, I think the thrust of the argument is, well, that's really talking about something like a code rate or a coding scheme.

But if we look at the definition of gross rate channel, there was no disagreement that it's the rate at which bits may be transmitted, not a code rate. It's the rate at which bits are transmitted. It may be influenced by the code rate, but the channel is the bits. So we're talking about the bits.

And if we -- if we look at Slide 73 that was just up there and he's talking -- there it's saying that the only place -- I think they've said in their briefing, the only place but the place where that net fixed rate channel is described is in Columns 9 and 10.

But if we look at 9, it says -- it should be understood that the bit ordering scheme of the present invention may also be used to flexibly obtain arbitrary code rates for LA schemes on variable rate. So everything it's talking about in 9 and 10 is about obtaining arbitrary code rates, not a fixed code rate, not a net code rate, and certainly not a net fixed code rate, language which is never used anywhere in the specification. And it's arbitrary, and it's variable.

And then it -- at the top of Column 10, it says, then, as many bits as is needed to obtain the subsequent ones are transmitted from the reordered mother code word, as many bits as is needed. That's the same language that's used to describe every other gross rate channel implementation here.

And the term gross rate appears in the specification about 15 times. And if we look at what the invention is about, what they -- what they said when they talked about the problems associated with the fixed rate implementations before, at the bottom of Column 3 and top of Column 4, but particularly at Column 4, on Lines 18, it says, after talking about the prior art, and then talking about the problems of the prior art, they say: Accordingly, there's a need for a wireless communications system and method that addresses the aforementioned problems of the traditional wireless communication system by supporting incremental redundancy error handling schemes using available gross rate channels. This need and other needs are satisfied by the wireless communication system, transmitter, receiver, and method of the present invention.

And then their specification talks time and time and time again about gross rate channels. It never mentions a fixed net rate channel, and I think the Court has it right that there is nothing in the specification which tells the

person of ordinary skill in the art what a fixed net rate channel is.

THE COURT: Thank you.

What is the next term?

MR. BURGESS: I think we'll move on to the '851 patent, Your Honor.

THE COURT: All right.

MR. HESS: Kevin Hess for the Plaintiffs, Your Honor.

There are only two terms at issue here for the '851 patent. And the first is -- the first at issue is this transmit/transmitting term, and before we get into the parties' constructions, I think it would be helpful to orient ourselves into the claim and see exactly how this fits into the rest of the claim language.

So you can see here that what's claimed in the relevant claims is a receiving unit configured to receive a first data and a second data, multiple streams of data, each of those streams of data comprising multiple blocks that are divided in frequency. There's also a calculating unit that's configured to calculate CQI values for those blocks on those datastreams and then a transmitting unit configured to transmit CQI values back to the base station.

The last clause there is a wherein clause that's related to how the calculation is done. You can see that

it's referring to how the plurality of blocks where the second data is calculated with respect to the first and so on for the second block.

So turning to, first, PanOptis's proposed construction, I just wanted to make a note here that PanOptis's construction was merely intended to clarify that the first and the second words here in the claim language refer to the first data and the second data.

In the claims, there's -- there's first and second that are being used in a couple of different ways, and you can see that the parties agree that in this claim limitation, the first data refers to the first -- I'm sorry, the first absolute CQI value refers to an absolute CQI value on that first data stream, and the same for second.

That's the only change we're trying to make with our proposed construction just to clarify exactly what that first and second word was supposed to mean, but if Your Honor would feel more comfortable with the plain and ordinary meaning of this -- this claim language, then, of course, we'd be fine with that.

The problem with Your Honor's preliminary construction, as it currently stands, is that it just adds a limitation that just isn't there.

Huawei's proposal and the Court's preliminary construction would rewrite the claims to totally change

their meaning, specifically requiring that what's transmitted is CQI values for multiple blocks of the first data and multiple blocks of the second data when that's just not supported by the claim language.

Why this is important, we can look at Figure 6 here to show the first row there is related to the first data, the second row, the other substream, is related to the second data, and you see we've got multiple CQI values that have been calculated for each of these blocks of data.

What's claimed is transmitting the first absolute CQI value for the first data and the second data relative to that value in the same block. In the same block is crucially important here, and we don't think the Court's preliminary construction gives any meaning to that that phrase.

Huawei's proposal and the Court's construction here is that all of the blocks -- I'm sorry, all of the CQI's values for all of the blocks in both datastreams are transmitted back up to the base station, and I think that cuts pretty clearly against the actual claim language that is -- that is in Claim 1 and, again, in Claim 5.

So if you look at what's done in the calculating step here, you're calculating values, the first absolute CQI value per each of the blocks in that data. And you do it again, the second absolute CQI value per each of the blocks

for the second data.

Crucially, that same -- that same phrase is not included in the transmitting unit limitation.

THE COURT: But the first limitation that you're referring to up there, the calculating unit, that is calculating a first absolute channel quality indicator. And then the next limitation is transmitting the first absolute CQI.

Why isn't the "the" first absolute CQI, the "a" first absolute CQI referred to in the preceding limitation?

MR. HESS: Yes, Your Honor.

So what's -- what's actually being claimed here is not calculating a first absolute CQI value. What's claimed is calculating a first absolute CQI value per each of the blocks.

THE COURT: Right.

MR. HESS: So there are clearly multiple CQI values that are being -- that are being calculated for each of the datastreams.

And what's then transmitted back to the base station is not just this "the" here for the first absolute CQI value in this transmitting limitation, it doesn't hang out on an island on its own. What's being transmitted is the first absolute CQI value and the relative CQI value of the second absolute CQI value in the same block.

THE COURT: Why doesn't that require that it be for each of the blocks? I understand that relative is what ties into the same block. Clearly, you can't determine that relative relationship without looking at the same block, but I don't understand how you're proposing that the per each in the first limitation isn't built into the second limitation.

MR. HESS: I think it's pretty clearly not if you look at the prosecution history. This exact limitation was -- had a slight amendment to it, and the amendment is not as crucial as what the patentee -- the applicant said about this limitation.

And I'll just read it here: Claims 11 and 18 are amended to clarify that the first CQI value -- the first is an absolute value and is not a relative value.

THE COURT: Of course. The --

MR. HESS: Right. So I'm actually not understanding the dispute then.

THE COURT: Well, it -- it is referred to as an absolute value in the claim limitation itself.

MR. HESS: Right. So it's an absolute singular.

What's being transmitted, the first CQI value that's being transmitted is a singular value for the first data and a singular value for the second data.

THE COURT: But how does that address whether it's for each block?

MR. HESS: Well, because up here we're talking about per each of the blocks, plural, and what's actually transmitted is in the same block, singular.

THE COURT: Well, the reason it's in the same block, singular, is because there's only one -- it -- it's saying it's in each block. So, of course, that would be referring to a single pair of blocks.

MR. HESS: Well, I -- I don't know if that's fair, especially in light of the -- the intrinsic record and the specification where the patent discloses many different ways of calculating CQIs and many different ways of feeding back CQI to the base station, including -- this is -- and this is not from -- Huawei complains in its briefing that we're picking and choosing from various embodiments. This quote right here is not from an embodiment. This is from the means for solving the invention in Column 2 and the background of the specification.

And what it says is: A feedback generating section generates the feedback information from an absolute value, singular, of a C -- CQI of the reference antenna and the relative values for the other multiple secondary antennas.

There's other embodiments that talk about giving back in an absolute value, another absolute value, and then here, this last one: By this means, feedback information is generated such that the CQI reference of the antenna alone

is given an absolute value.

THE COURT: Show me where there's something that indicates that Claim 1 -- let me think. I think that's the claim we're dealing with here. Yes, that -- that the first absolute CQI shouldn't be read as applying to each of the blocks.

MR. HESS: In the calculating step or in the -- the transmitting step, because I think it's a different answer depending on what limitation you're talking about.

THE COURT: In the transmitting step, then.

MR. HESS: So in the transmitting step here, we've clearly got three elements of this limitation. We're transmitting. And what are we transmitting? We're transmitting two things. The first ab -- absolute CQI value and the relative CQI value of the second absolute CQI value in the same block.

And I know that's a mouthful, and it's coming out very quick, but the point is that there's a singular value, and what's transmitted is the second value that's in the same block, not in all the same blocks, not per each of the blocks. And that's exactly the per each of the blocks language from the calculating limitation is exactly what Huawei is trying to read into its construction.

But that's -- that's clearly not -- the patentee took great pains not to include per each of the blocks in

the transmitting step here. And I think that's -- that's about as -- as -- as good as we can do to explain sort of the -- the discrepancies between the two parties' constructions.

THE COURT: What is the antecedent for the article "the" in the transmitting unit limitation?

MR. HESS: Well, I would not take it just with the first absolute CQI value by itself. What's being claimed is when you transmit, you're transmitting a pair of -- of CQI values. The first absolute CQI value, and which one? The one that's in the same block as the second absolute CQI value.

And what's claimed is not necessarily the penultimate or the first or the second CQI values. What's claimed is transmitter configured to transmit a pair of CQI values.

THE COURT: So you're saying it could read -- you could substitute "a" for "the" there, and it would be the same thing?

MR. HESS: I think that's right, but I think that changes -- certainly less substantial than reading out in the same block and reading in.

Your Honor, before, expressed skepticism with Defendants reading in the word "only" into a claim construction, and I think, you know, we should approach

this -- this construction with the same skepticism when "for each" is injected into the claim construction where it doesn't belong, especially, again, considering the fact that the other limitation surrounding the transmitter step actually had that language included, and the patentee chose not to include that in his limitation.

THE COURT: Okay.

MR. HESS: Thank you, Your Honor.

THE COURT: Thank you, Mr. Hess.

MR. HASLAM: Just a few comments.

I think the Court asked the right question, and that is "the" in a claim usually requires an antecedent, and the antecedent is in the calculating unit, and it's a first CQI value for each of the blocks.

And I think the Court's construction is supported. If we look at the wherein clause in the claim -- keep going, it's down further, a little further. Keep going, keep going. There.

The wherein clause is talking about the calculating. So the wherein clause is further defining the calculating unit. And -- and I won't walk through it, but it's clear that the wherein clause, when it talks about how you go about calculating the absolute value and the relative value clearly is talking about how you do it for multiple blocks, a first block and a second block, and you do it in

the same block, which is you're pairing the absolute and the relative for each block. And I think the wherein clause further supports the Court's claim construction that the antecedent for transmitting the first absolute CQI value and the relative CQI value, the antecedent is the first absolute CQI value for each of the blocks for the first data, et cetera, for the second.

So I think the Court's claim construction is faithful to the claim language, the specification, and particularly the prosecution history.

When they amended the claims, they pointed to Figure 6 as exemplary of what the claim was talking about. And Figure 6 is where you do it block-by-block, not on an averaging basis. You do it block-by-block, and that embodiment is specifically referred to in the specification as being important when you want to do frequency scheduling.

And frequency scheduling is when you want to determine what are the best channels on which to communicate. And to do that, you need to go on a chunk-by-chunk or block-by-block basis to determine which is the best channel to send on.

So the Claim 1 embodiment, I think, reads on Figure 6, which is introduced in the specification as an embodiment which enhanced -- which enables frequency scheduling which requires sending block-by-block for each of the blocks

during the -- that have CQI and a relative CQI value measured.

THE COURT: Thank you, Mr. Haslam.

MR. HESS: If, Your Honor, I may just make one quick reply --

THE COURT: Sure.

MR. HESS: -- on -- on this term.

Go back to our slides, please.

The only point I wanted to make is that it seems like the parties agree here that the wherein clause relates to the calculating step. And there's no dispute that the calculating that's being done is on a chunk-by-chunk basis. And, clearly, there's a dispute as to what is being transmitted after all that calculation is being done.

And we think that's pretty clear based on the claim language that is what is being transmitted is only one pair of blocks, a value in the first data and that same value -- or a value in the second data that's in that same block.

So unless there's any objections, I'd like to move on to the next term.

THE COURT: Is the same block term or phrase used anywhere but where the relative value is introduced?

MR. HESS: I'm not exactly sure which relative value introduction you're talking about here. But you can see it's in the calculating step, the very last part, from

the first absolute CQI value to the second half of the CQI value in the same block.

So that's talking about how when you make the calculation, you're looking at two blocks, two values, that are in the same block. And you do it per each of the blocks in the calculating step. But then once you get to the transmitting unit, you're not transmitting for each of the blocks. You're transmitting a value and another value in the same block.

THE COURT: It just appears to be clear that the reference to the same block in the transmitting limitation is talking about the fact that you can't come up with a relative value without knowing what the two values are that are being compared. And so they're -- they're in the same block, but I don't -- I don't see that as indicating that that's all that's transmitted is one pair of values, but anyway, I understand your argument.

MR. HESS: Moving on then to the wherein clause. I'll be brief. It's a very, very long claim term. You can see here it's this entire last limitation. And I don't want to belabor reading both the parties' constructions, but I think it might be helpful to see exactly how the parties have tried to clarify this -- this rather long claim term.

Huawei's construction has made a few changes. They dropped the "wherein" for some reason, and then changed the

words "first" and "second" to "initial" and "next."

In your preliminary construction, Your Honor, you noted that you'd be rejecting this temporal -- or the "initial" and "next," which we argue would introduce temporal constraint where one doesn't belong.

So moving on from there, we can take a look at PanOptis's construction. And really all we're trying to do is -- is give meaning to the jury as far as what a relative value calculation actually is.

Most of us in the room might -- might understand that when you're taking a relative value, you're talking about the difference between two values.

But the specification -- in -- in addition to that sort of general knowledge, the specification is -- is very clear that what -- what is happening when you're calculating this relative value is you're finding the values between two values. CQI values between the CQI value of the reference substream, and the CQI values of the substreams, other than the reference substream.

So when we see the values between two values, and this is, you know, repeated throughout the specification, we are just trying to clarify for the jury that what that means, the relative value calculation is finding this value between two values, and that's a sub -- a subtraction operation, and that's what we've tried to --

THE COURT: Why couldn't it be a ratio or a percentage or --

MR. HESS: I don't believe that -- that finding a ratio or a percentage is really finding the value in between two values. I think that's generally understood to mean just subtracting the two.

THE COURT: Is there anything else that -- other than the reference to between that you think supports that it has to be subtraction?

MR. HESS: No. But I think it's -- it's just not a reference to between. It's several references throughout the specification referring to how this calculating step is actually done, and how it's done repeatedly is define the values between the two values. And we think that it might be helpful to tell the jury that that calculation is just a subtract -- a subtraction operation.

THE COURT: When I see a limitation like that, I'm assuming that you have a concern about prior art. And so I'm looking for something that makes it clear that that limitation should be put in. And I don't think that the word "between" is enough to get you a limitation to subtraction, but --

MR. HESS: Understood, Your Honor. We still think it would be helpful to the jury to explain what the relative value calculation actually is.

THE COURT: Okay.

MR. HESS: That's why we're trying to incorporate that language from the spec.

THE COURT: Good to know. Thank you.

MR. HASLAM: Just one comment on that.

The claim -- the claim term isn't between. It's just calculated with respect to something that is greater than or less than is a comparison of two -- two values.

We have no problems with the claim -- Court's claim construction. I do have one question, and it's about the do not necessarily reference a temporal time order.

Does that mean that the first and second blocks could be any two blocks within the stream? And was the Court's concern that it didn't have to be the very first one that came in and the second one that came in?

THE COURT: I -- I didn't see anything that indicated to me that it had to be that the first one was before the second one in order -- in time order. That's --

MR. HASLAM: Okay.

THE COURT: -- that's what I'm indicating there.

MR. HASLAM: Okay. Thank you.

MS. WOODIN: Good morning, Your Honor. Christine Woodin for the Plaintiffs.

Next we have the '284 patent, and I think that someone from Huawei will begin, but I will approach with

binders if that's all right.

THE COURT: All right, Ms. Woodin. Thank you.

MR. HASLAM: Your Honor, I think that what I'm raising -- raise is the "reserve for" not meaning "set aside just for." I think the Court's claim construction with that note basically gives no effect to the word "reserved," which is used in the specification.

If we can put that first slide up.

The specification -- depending on how you count it, but the specification has 36 embodiments. But -- but whatever, it has 20 or 30 embodiments, only one of which uses the word "reserved."

The others talk about using it. The others talk about how it -- it can make use of it. This is the only place that the patentee uses the word "reserved" with respect to a transport format. And I think the Court's claim construction basically says that reserve doesn't mean what we think the word "reserve" means is to read the word out of the -- out of the claim.

And -- and I -- you know, there are many places I could start on this argument, but I think the one thing is, reserve here is -- is used with respect to one embodiment. And the argument that -- that there's many embodiments in the claim should encompass or be broad enough to encompass the embodiments that are disclosed in the specification, I

think, runs -- runs afoul of the fact that the Courts have recognized that not every claim has to cover every embodiment.

And -- and as I will show you, there are other patents off of this patent which have claims which use the terms, for example, used for or used other language to claim what is referred to here as reserved, which I think indicates that there are other ways of claiming more broadly, which they have done, but that in this particular claim, they have used the word "reserved."

For example, the 9,295,053, which is a continuation or a divisional of the '284, the claim uses the first subset of values is for determining the transport block size. And by reading out reserved, I think the Court has basically said, well, the -- the reserve claim means the same as one that they later claimed on other embodiments. Published Application 20160165593, which is on Slide 79, but what PanOptis argues for here is that reserved should be interpreted as used for.

Well, they knew how to do that because in this later application, which is pending, they've actually claimed the "used for" language. And, again, the 8,948,117, they claimed "reserved for."

So it is, I think, first and foremost, the notion that the claim has to include all of the embodiments

disclosed in the '284 patent isn't correct. And I think the Court's claim language, as I said, doesn't give meaning to the term "reserved."

THE COURT: Now, why can't reserved include the concept that the transport format values will be found in that subset without meaning that nothing but the transport format values will be found in that subset?

MR. HASLAM: Because of the way that the term "reserved" is used in the specification. And the term "reserved" is used, for example, in Table 10. Reserved for 1110 and 1111 are reserved, which means they don't contain a value for the RV value for those signals 14 and 15.

Now, this is in a shared field, not the joint -- joint coding field. But it's -- it's the way they used the term "reserved."

The same thing is -- is -- if I reserve something, it's set aside for me. It's not set aside for anyone else. And here they're saying these two values are reserved for -- for subsequent use or for later use, but they're not now available to be used for RV values.

Likewise, in the -- if we can go to the -- there's a reserve for out of range -- if we can go back to the spec. This is another place. '284, 27, 1 to 20, transport. The prior art yields up 2^5-1=31 transport format values. One value reserved for out of range. That indicates that that

value is used for out of range only, not for anything else.

So consistent -- these are -- these are different uses of the word "reserved," but they're using the word "reserved" in a way which connotes that it is exclusively set aside for either future use, or it's set aside for one value, an out of range value. And that should inform the definition or the -- the construction of the word "reserved" in the claim we're talking about.

And if we look, for example, at Table 3, Table 3, you have the TF ranges on the right-hand side, which have both TF values, transport format values, and RV values. That -- how can you say, as illustrated there, that the values that they say are TF ranges, which are the first, I think, 12, are reserved for transport format when they also explicitly indicate an RV value? It indicates both.

What might indicate in -- in Table 3 as -- as something that's reserved are the RV ranges, the 1, 2, 3 at bottom there, because it says a transport value is not available. So there, when you send those last three bit streams in Table 3, you're indicating only an RV range. You're not indicating transport format range.

And, likewise, in Table 4, you've got -- and here you've got a transport format for the first 12, but it also indicates an RV range, and the RV ranges vary. So it's not something that you can say is necessarily implicit. It is

explicitly being defined here as a set of transport format ranges which can occupy the first 12 spots and different RV values.

So here, you're explicitly linking a transport format and an RV value, and that is not what is -- is reserved for either one's use. It's -- it's used by both.

And -- and what Table 4 depicts, I think, is consistent with Claim 1 with respect to the RV range because the RV Ranges 0, 1, and 2 are not available.

And if we go to, I think, since reserved here is, I think, being used in its ordinary context, if we look at what the meaning of reserved is, held in reserved, kept back, or set aside, designated as unavailable, except for a certain purpose or user, kept in reserve, that's consistent with the definition of reserve. It's consistent with the use of the out of range being reserved in one. It's consistent with those two values in Table 10 being reserved. Set apart for someone or some particular use or purpose. Cannot be used for any other purpose, kept, or set apart.

I -- I think that by reading out reserved, the Court has -- has broadened the claim, and potentially it covers all the embodiments in the specification, but it -- it doesn't need to, as the Federal Circuit has said. They've got other applications where they have claimed the claim broader.

And it -- by reading out the term "reserved" and -- and broadening it beyond its ordinary meaning, I think the Court has done an injustice to the claim, an injustice to the language that the inventors chose. They had all those embodiments they could have chosen, and one place in the specification, they talk about reserved, and that's the claim term they decided to use in the claims that they're asserting here.

And I think you have to give effect to that. That's our argument.

THE COURT: All right. Thank you, Mr. Haslam.

MS. WOODIN: Can I have Slide 24?

So we agree with Your Honor's preliminary construction, rejecting Huawei's attempt to rewrite the claims. And I first take issue with Huawei's continued statements that Your Honor is reading out "reserved." The construction says it's construed according with its plain and ordinary meaning. It just reject -- rejects Huawei's attempt to narrow the term. It doesn't read "reserved" out of the claim term. It's still going to be there.

And so Huawei relies on this language from the patent to say that this is only one embodiment, one of 36, I think, they said. But this is actually where the patentee introduces in the summary of the invention the idea of having a first subset of values reserved for the transport

format and a second subset of values reserved for the redundancy version.

The remaining embodiments in the summary of the invention refer back to this. They say: Wherein the first subset and wherein the second subset. And then it's followed up by a detailed description that spans pages and pages and gives examples of how this first and second subset of values is used.

And Huawei admits that their interpretation of the claims would read out every example that the patentee gives in the detailed description of the -- of the invention.

And the fact that the patentee refers back over and over again to this first subset and second subset I think is completely inconsistent with how Huawei's suggesting that Your Honor read the patent.

Every paragraph that includes the word "embodiment" shouldn't be read in isolation as a separate embodiment. The patentee introduces this idea, and then provides different ways that it can be implemented.

And in their argument now, Huawei points to Tables 9 and 10, which is the only time that "reserved" appears in the table. But as counsel acknowledged, those are actually tables of the alternate shared field approach that the patent describes, which is not claimed in the '284 claims.

And I think that it's clear from how Huawei

interprets "reserved" with a set just aside for that it's narrower than the claim language. And I just wanted to point out that that's supported by the case law that Huawei cites.

So if we could switch to Slide 31.

So Huawei cites this Customedia Techs case to support its position where the Court construed reserved advertising data storage to mean data storage section set just aside for.

And I believe Your Honor wrote the opinion in this case, and you may recall that there, the patentee had made statement after statement in the prosecution history centered on the word "reserved," continually saying that it was reserved specifically for or set just aside for this specific data.

In fact, the examiner -- this is a quote from the opinion where the Court is quoting the examiner who commented that it was difficult to even search for prior art because the patentee was using the word "reserved" in such a different way than the prior art did.

And so I think that Huawei's reliance on this case is inapposite, but -- but more than that, I think this shows that the "set just aside for" language is narrowing the term "reserved" and that that's not the plain and ordinary meaning.

So we agree with your Court's preliminary construction, and unless you have any questions for me, I'll go ahead and sit down.

THE COURT: All right. Thank you, Ms. Woodin.

MR. HASLAM: The word "reserved" appears in the general background portion of the patent. And where they describe the specific embodiments, the word "reserved" only appears in the two places that I indicated.

And, yes, counsel was right, it is with respect to the shared, which is not what's covered here, but that wasn't the thrust of my argument. The argument is if you wanted to know what they meant by reserved and you look at how they use reserved there, it is set aside for either out of range, or it's reserved for future use.

Now, I recognize in general at -- at oral arguments we make arguments, and the Court asks questions. But if I were to be -- indulge myself, I would ask at least rhetorically, given the plain and ordinary meaning, and it doesn't mean just set aside for, I -- I am perplexed as to what -- when we get to the jury, what it is I can argue reserved means. It means nothing.

THE COURT: I -- I don't think you're limited to nothing, but --

MR. HASLAM: But --

THE COURT: I think that what you are limited to is

not "set aside just for," but...

MR. HASLAM: And I guess this may -- may or may not come up in motions at some point. I don't want to run afoul of the Court's construction, but I --

THE COURT: I -- we -- I will elaborate more on what I think the term includes. But I would rather not do it off the cuff because I think I will be hearing about it afterwards.

MR. HASLAM: I certainly understand. But with that, I guess, you know, we'll have to deal with what comes out in the construction. But I just think that plain and ordinary meaning, as argued by PanOptis, essentially does read reserved right out of the claim and gives it no meaning whatsoever.

I mean, the jury's going to think when I called a restaurant for reservations, that's time set aside for me. I don't want to go there and say, well, you know what, there's 17 other people sitting at all the tables, sorry, I don't care what your reservation was.

THE COURT: That's not the first time I've heard that metaphor.

MR. HASLAM: Okay. That's -- that's all I have.

THE COURT: All right.

MS. WOODIN: I have just a comment.

THE COURT: All right. Go ahead, Ms. Woodin.

MS. WOODIN: In -- in thinking about the use of the word "reserved," I just wanted to point out that in the alternate approach in the patent, there's a shared field where depending on whether it's an initial transmission or a retransmission, the values can be used for either a redundancy version, or they can mean something different and be a transport format.

And in the jointly encoded approach, values are actually reserved for, you know, one meaning.

And I think that that is one way in which the patentee distinguishes the shared field approach from the jointly encoded approach.

THE COURT: All right. Thank you.

MS. WOODIN: So the next -- so the next claim term is from -- is wherein the redundancy version of the protocol data unit is implicit in the transport format indicated -- indicated by a sub -- corresponding value of the first subset.

And, Your Honor, we're -- we're happy with your preliminary construction on this one. So unless Huawei would like to argue it, I think we can move on.

MR. HASLAM: We're happy with the Court's construction.

THE COURT: All right. Thank you.

MS. WOODIN: If you could switch to Slide 4.

And the last term for the '284 patent is "processing unit." We believe this term should not be subject to 112(6), but to the extent that Your Honor believes it should be, as the preliminary construction shows, we think that the corresponding structure that you identified is correct.

THE COURT: All right.

MS. WOODIN: Unless you have -- no questions?

THE COURT: I -- I don't. I think this is always a difficult determination. It has to do with just what description is set out in the claim for this term. And under the circumstances of this claim, I think 112(6) is appropriate. But -- so if -- but if you don't have any comment on the proposed structure, that's fine.

MS. WOODIN: Okay. Thank you.

THE COURT: Thank you.

MR. HASLAM: I have just -- I think just one question. In the structure, you refer to the -- according to an algorithm, the algorithm is what's referred to in the cited references to the specification and the figures. Is that what the Court intended?

THE COURT: Yes. Although I think in the order, we'll talk about the fact that I'm not sure that an algorithm is required here, but to the extent it is, it would be what is set out.

MR. HASLAM: Okay. Understood. Thank you.

MR. YOUNG: Your Honor, Stanley Young for the Huawei Defendants on, I believe, the last term, Item 13, "in response to." Not only am I last, but I'm unlucky in that I'm what stands between all of us and lunch, so I will try not to be too long.

The Court's note in its preliminary construction is not sufficient to capture the meaning of that term as it is used in the claims.

Rather than some causal relationship being required, we believe it should be a binding causal relationship or a determinative causal relationship or a mandatory causal relationship.

And what we see in Figure 6A is why. Just to take the example of the triggering event, Item 616, leading to a scheduling request 604. There's a branching there. There's a yes, and there's a no. If there is a triggering event, you go back up to Item 604. There are no maybes in there. There are no contingencies. There are no further ifs. There's just a yes there.

The same is true for Items 604 and 608. The transmission of the scheduling request takes place. Without any contingency, other than what's listed there in 602 and 608, the transmission of the buffer status information takes place, once the scheduling grant in 606 is received.

THE COURT: What would be your authority for reading Figure 6A into the claim?

MR. YOUNG: Well, it is -- first of all, as we've cited in our claim -- in our papers, we have the American Calcar case, which does construe the terminology in response to. And it refers to it being as a cause and effect relationship that excludes action on the part of the user, which is a different event or contingency. If it's a different event, an intervening event or contingency, then it's not in response to the initial cause.

Let me give the Court an analogy. Let's say that you have a lawsuit in which the District Court dismisses a case. It goes up to the Supreme Court, and the Supreme Court reverses the dismissal, which had been affirmed by the Federal Circuit, and says we will remand for proceedings consistent with our opinion. It goes back down to the Federal Circuit. The Federal Circuit has to make a decision, given the Supreme Court decision, whether to affirm the reversal or tell the District Court not to dismiss the case.

In that event, the Federal Circuit decision is an intervening contingency or determination. And whatever the District Court does is going to be in response to the Federal Circuit order.

Now, it is true that the Supreme Court decision has

some -- some causal effect. It wouldn't have come back down to the District Court without the Supreme Court's decision, but it -- whatever the District Court does is actually not in response to the Supreme Court's decision. It's in response to what the Federal Circuit does in light of that decision.

So another way of putting this would be that while what Your Honor describes in the preliminary construction may be a sufficient cause, if it's not a -- maybe a necessary cause, but if it's not a sufficient cause, then in our view, there is not responsiveness. And -- and -- as we can see in the diagram from American Calcar, that's what the Federal Circuit held with respect to that very same language in a different patent.

Now, the -- going back to the diagram here, there's the yes/no. There is the language at Column 3, Lines 15 through 18, which says: If a triggering event has occurred, then the UE transmits a second SR. The if/then language does not allow for something else intervening to determine whether the then happens or not. I mean, that's -- that's software.

If you have if/then, then -- then if the condition occurs, the consequence must also occur.

THE COURT: Mr. Young, isn't this just clearly and expressly an embodiment?

MR. YOUNG: This is an embodiment. Let me go on to address some of the other embodiments that are relied on by PanOptis.

Those embodiments are all in Column 7. There are a couple also in Column 3. But let me focus on the ones in Column 7. And this is something that we didn't put in our papers, so I'm going to indulge the Court and use the ELMO here.

If we could go to the ELMO.

And you'll see at Column 5, there's a description of what Figures 5 and 6 are. Figure 5 illustrates a further improved scheduling message flow between the eNodeB, the base station, and two UEs, two mobile terminals. That's in contrast to what's in Figures 6a and 6b, which illustrates a process according to an embodiment of the invention.

And if you look at 6b, it's talking about just a single mobile terminal, what goes on inside a cell phone, not what goes on between a base station and two user devices. That's important because of what happened during prosecution.

During prosecution, the examiner said there are two sets of claims here in this application. There's one set of claim drawn to a mobile terminal, determining that a triggering event has occurred, et cetera. This is Exhibit 24 to our papers, by the way.

The second set of claims was drawn to receiving an SR from a second mobile terminal while the first mobile terminal is utilizing the uplink resource; that is, you have two mobile terminals in that second set of claims.

That second set of claims was canceled in response to the examiner's election restriction. And that second set of claims, it's what's in Figure 5. Figure 5 has the first UE and the second UE communicating with the base station. That Figure 5 is what is being described in Column 7. If you look at Columns -- Column 7 at Line 22, it talks about Figure 5.

And Figure 4 is what's being discussed prior to that point, which is really the same thing. You should see the diagram. You have the base station and the two terminal units.

What's described in Figure 5 and in Column 7 is very different from what's described in Figure 6 and in the claims of the patent as actually issued. What's described in Column 7 and Figure 5 was canceled in response to this election requirement.

So all of the examples that PanOptis points to where it tries to allow for some sort of intervening cause are from embodiments that are not claimed and that correspond to claims in the original application that were canceled.

Now, this is an important issue, and I'll point to 02 Micro. This -- this is going to be an issue that will determine whether the case goes one way or the other.

There are infringement allegations that relate to scenarios where there is an intervening cause. And for the Court, I think, to say that there is -- it suffices to have some causal relationship would be an error in light of the specification and how these claims should be construed.

THE COURT: I think what you're asking us to do at claim construction is to get into the very factual nature of -- of infringement, and, I mean, the -- this very strong language you're proposing that there not be any occurrence of any intermediate condition, event, or -- or determination. And it's a very simple thing to come up with an intermediate condition, event, or determination.

It's been -- you know, if you use the example of dialing my phone number and causing my phone to ring, that's -- my phone is ringing in response to you dialing the number.

But it depends upon the intermediate conditions that there is a line connected between the two, that the phone company's switches are working, that my phone is properly plugged in. There are all sorts of ways you could say, well, that didn't directly cause it, it took a lot of other events.

But I think that's a fact issue about whether something is in response to it. And I just -- my -- I don't see a justification for slicing it as thinly as you're seeking to do here.

MR. YOUNG: Well, Your Honor, at this point, I -- I would propose Your Honor's note in the preliminary construction, but modified to substitute some for binding or mandatory or determinative --

THE COURT: What does that even mean? When -- use my example --

MR. YOUNG: Yes.

THE COURT: -- where you're dialing my phone number. What is the binding cause of it?

MR. YOUNG: I think if there's no contingency between my calling and Your Honor getting the ring tone or getting the -- the ring, that that -- that would satisfy that event.

To take the Court analogy, if the Supreme Court's decision were we order the Federal Circuit to order the District Court to dismiss the case, that -- then the District Court's dismissal would be, I believe, in response to the Supreme Court's order.

But if there's some option in the middle, the -- the Federal Circuit has an opportunity to apply the Supreme Court's decision and make a decision one way or the other,

then I think the fair reading of that situation is that the District Court's order is in response to what the Federal Circuit does and not in response to the Supreme Court.

THE COURT: Well, there's always an option there. The Federal Circuit could say, we don't think that's what the Supreme Court meant.

You're -- you're wanting to eliminate any intermediate condition, and that -- I -- I just -- I have a problem saying that "in response to" requires that kind of direct no -- no intervening condition, event, determination.

I do think that's going to be a very fact specific thing, and there may be situations where it's not in response to, even though there is, you know, some very vague causal connection.

MR. YOUNG: Well, it -- Your Honor is correct, there -- there may be, and probably will be some factual issue. We do believe that a further construction is going to be useful to the jury, that implementing what's shown in Figure 6a, which really is the only embodiment that's relevant to the claims of this patent.

As we mentioned in our papers, the '311 patent, which is based on the same specification, has the cancellation contingency that is the first example relied upon by PanOptis, but that's a different patent. Those claims are not in this patent.

And we respectfully disagree with the Court's inclination on this issue. And I think at this point, I don't have anything else.

THE COURT: All right. Well, I -- I appreciate your argument on that, Mr. Young.

MR. YOUNG: Thank you, Your Honor.

MR. DEZERN: Thank you, Your Honor. David DeZern, again, for Plaintiffs.

I think your -- your phone analogy exactly captures the issue, and you recognize the mischief that can be achieved with how you frame something that occurs in response to something else, and whether or not there's something intermediate is entirely arbitrary in terms of how you frame that second event.

So unless Your Honor has any questions, I will sit down.

THE COURT: Thank you, Mr. DeZern. I do not.

Are there any other matters to come before the Court this morning? I guess it's now afternoon. If not, good enough.

Then thank you, and we're adjourned.

COURT SECURITY OFFICER: All rise.

(Hearing concluded.)

CERTIFICATION

I HEREBY CERTIFY that the foregoing is a true and correct transcript from the stenographic notes of the proceedings in the above-entitled matter to the best of my ability.

/S/ Shelly Holmes — 1/1/18

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